Volume VII, 2008

University of Wisconsin-Stout

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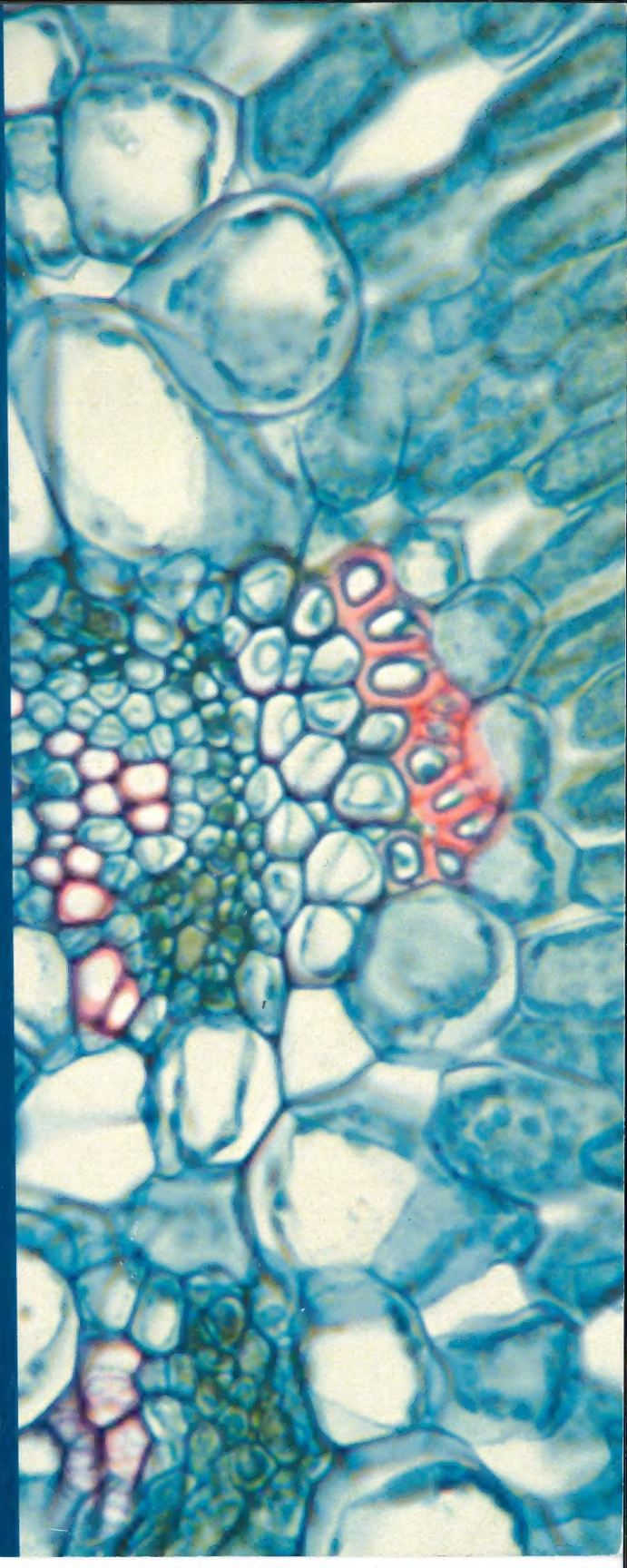

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Foreword

Welcome to the 7th Edition of the *Journal of Student Research*, a University of Wisconsin-Stout publication that showcases exemplary student research and creative activities.

The *Journal of Student Research* is a testament to the University of Wisconsin-Stout's commitment to student research and support of student organized activities. This Journal is an exceptional example of the high quality work produced by students, as each component - from writing to editing to graphic design and printing - is performed by students. Furthermore, exposure to the editing process helps students demonstrate their determination and ability to accept constructive criticism to improve their work.

The Journal can be found both in print and online, allowing wide exposure that enables students to utilize their publication to benefit future personal and professional endeavors even after graduation.

We would like to extend our appreciation to everyone involved in the production of the 7th edition of the *Journal of Student Research.* Without the hard work of students and their faculty mentors, the Journal would not be possible.

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Gender Stereotypes Associated with Altruistic Acts

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Keywords: Altruism, Gender Stereotypes, Vignette

Abstract
Possible gender stereotypes associated with altruistic acts presented in two types of vignettes were investigated. A sample of 72 General Psychology students were recruited to participate. The researchers had three main hypotheses: Females would more likely be perceived as the performers of an altruistic act, females would more likely be perceived as the receivers of an altruistic act, and the more extreme act of altruism would be perceived to be made by a male and the minor by a female. Results revealed a main effect of Vignette Type on the perceived gender of the performer and the receiver of the altruistic act. A significant Rater Gender x Vignette Type interaction on Gender of Receiver was also found. This study was important and beneficial to examine expectations of gender during the performance of altruistic acts and puts societal influence on gender roles into context.

Prosocial behavior is a broad term that is defined as "voluntary behavior intended to benefit another" (Eisenberg, Fabes, & Spinrad, 2006, p. 646). Prosocial behavior was not extensively studied until 1970, and since then has been a great area of interest and the focus of many studies due to a desire to understand human nature and motivation involved in prosocial and moral behaviors (Eisenberg, et al., 2006). Altruism is considered a subgroup of prosocial behavior, and can be defined as "voluntary, intentional behavior that benefits another and that is not motivated by the expectation of external rewards or avoidance of externally produced punishments" (Chou, 1998, p. 195). Altruism and prosocial behavior, in general, have been studied from a variety of different angles. The major topics in research conducted on prosocial behavior are biological, cultural, and social determinants of prosocial tendencies. Research has also looked at developmental trends in prosocial behavior and how cognition and disposition relate to prosocial behavior. Furthermore, gender differences associated with the performance of altruistic acts, the different attitudes towards altruism based on gender, and the gender stereotypes that exist related to altruistic acts have been studied (Eisenberg, et al., 2006).

Dietz, Kalof, and Stern (2002) looked at gender in relation to specific social psychological values; both the meaning and the importance of these values were analyzed. A national U.S. sample of white adult participants had to rank order the values of altruism, self-interest, traditionalism, and openness to change through a computer-assisted telephone interview. It was found that, overall, there was no significant difference in value meaning for men and women. However, the importance and priority those values were given differed in men and women. Specifically, it was found that women placed more importance on the social psychological value of altruism than did men. The authors projected that this difference could be due to the differences in socialization of men and women. Women are socialized to have concern for others and to take care of one another, while men are mainly socialized to be in competition with each other.

Despite the fact that men and women tend to place different values on altruistic acts, Krebs (1970) found that there were no gender differences in the actual performance of altruistic behaviors. Similarly, Chou (1998) examined the affect of gender and participation in volunteer activities on altruistic behaviors. The study found that there was a positive effect of age on altruistic behavior- the older the adolescent, the greater was their score for prosocial behavior. However, there was no gender difference for the frequency of altruistic behaviors. Conversely, a meta-analysis conducted by Eagly and Crowley (1986) found that, when looking at actual number of altruistic behaviors, men perform altruistic acts more frequently than women. Specifically, the higher frequency of helping usually occurred during situations considered instrumental. Instrumental situations deal with more self-oriented behaviors including independence and self-confidence, such as a situation involving a high amount of risk or ability to stay calm and think rationally in an emergency (Eagly & Crowley, 1986). This is compared to expressive situations that deal with more interpersonal behaviors and are associated with concern for others (Spence & Helmreich, 1980). The higher frequency of helping was also involved in situations chivalrous or heroic in nature (Eagly & Crowley, 1986). Spence and Helmreich (1980) reviewed all of the literature on gender role attitudes and behaviors and originally classified the gender role traits into these two categories: instrumental and expressive. They found that women traditionally possess "interpersonally-oriented expressive qualities, for example, kind, tactful, aware of other's feelings," whereas men actually possess stereotypical "self-assertive instrumental attributes, for example, independent, active, self-confident" (p. 150). Eisenberg, et al. (2006) aptly pointed out that there are many inconsistencies amongst the studies involving which gender is actually more altruistic.

Furthermore, Eisenberg, et al. (2006) pointed out that "based on stereotypic gender roles, females generally are expected and believed to be more responsive, empathetic, and prosocial than males, whereas males are expected to be relatively independent and achievement oriented" (p. 696). Other than this acknowledgement of gender stereotypes in altruistic situations, studies conducted on the perceptions of gender on altruistic behaviors are minimal. Such studies mostly involve children's perceptions about gender and the role of gender in altruistic acts. The research has consistently found that, when children are asked who is more altruistic, girls are generally rated as more altruistic than boys; this perception also exists in teachers (Shigetomi, Hartmann, & Gelfand, 1981).

Further research on children's perceptions of gender in altruistic situations has explored the possibility that this impression that girls are more altruistic may be due to a measurement bias (Zarbatany, Hartmann, Gelfand, & Vinciguerra, 1985). Specifically, Zarbatany, et al. (1985) created an empirically derived measure with examples given by children to minimize a sex-bias in the formerly used theoretically produced instrument. Sixty-five children were asked to write descriptions of when they have watched a peer, or have directly "(a) helped another child, (b) shared with another child, (c) made another child feel better, and (d) got another child out of a tough spot" (Zarbatany, et al., 1985, p. 98). These four types of prosocial behavior are referred to frequently when discussing child altruism because they are a good representation of prosocial behavior as a whole. The children were then asked whether they thought boys, girls, or neither, were more likely to perform these four types of prosocial behavior. The descriptions were then rated as either more masculine or more feminine in relation to these four categories and a measure was created containing items on a 5 point scale as "definitely more likely to be

performed by boys (1) to equally likely to be performed by boys and girls (3) to definitely more likely to be performed by girls (5)" (Zarbatany, et al., 1985, p. 99).

Zarbatany, et al. (1985) then administered this measurement to a second group of 58 children in two forms: peer nomination or gender rating. Once again, girls were generally perceived to be more altruistic than boys. However, they found that it depended greatly on the content of the items and on the scale of measurement. For the feminine and gender neutral items, girls were more often selected as altruistic, for more masculine situations, males were more often selected. Overall, girls were more likely to select girls as being more altruistic, and boys were more likely to select boys during responses. The only major difference between the two forms used to collect data was that the numbers were more extreme on the gender rating form than on the peer nomination form (Zarbatany, et al., 1985).

This review of the literature suggests that there is still much to learn about gender stereotypes that may accompany adults' perceptions of altruistic behavior. After reviewing previous research, and specifically Zarbatany, et al. (1985), the present study was designed to further examine gender stereotypes associated with altruistic acts but with adults instead of children. Two types of vignettes were presented to explore any differences in perceptions associated with different levels of altruism. One vignette described a major act of altruism; a situation where there was a greater cost (e.g., effort) to the person performing the act and greater benefit to the recipient. A second vignette described a minor act of altruism; a situation where there was a smaller cost to the person performing the act and lesser benefit to the recipient (Swap, 1991). The analysis focused on participants' inferences about the gender of the actors in the altruism vignettes.

There are three main hypotheses for this research. First, it was expected that people would infer a person who performs an altruistic act is more likely to be female. This hypothesis was based on previous research suggesting that people generally believe girls are more altruistic than boys (Shigetomi, et al., 1981).

Second, it was expected that people would infer a person who receives an altruistic act is more likely to be female. While there was no research found that directly examined perception's of the gender of the recipient of an altruistic act, this hypothesis is a consistent with research on gender stereotypes. For example, Deaux and Lewis (1984) found that women are stereotypically viewed as more passive and males as more aggressive.

Finally, it was expected that participants would infer a person who performs the more extreme act of altruism is more likely to be male and a person who performs a minor act of altruism is more likely to be female. This final hypothesis was based on Eagly and Crowly's (1986) research which found that while females are expected to exhibit many helping behavioral traits and have the stereotypical caring type persona; males are expected to engage in high risk behaviors that are associated with heroism.

Method

Participants

Participants were 78 college students in General Psychology courses at the University of Wisconsin- Stout. The researchers recruited participants by going into three General Psychology classes. Of these participants, six were eliminated due to incomplete surveys, 42 were female, and 30 were male.

Materials

Participants were given a research packet containing one of two short vignettes and a questionnaire. One of the vignettes described a minor act of altruism and the other described a more extreme act of altruism. The vignette of the minor act of altruism was a narrative of a person returning another person's grocery cart at a supermarket. The major act of altruism vignette described a person visiting a fast food drive-thru where the person in the front car paid for the person behind them. There were no hints at a particular gender. The participants then completed a brief questionnaire containing items about their perceptions of the vignette. Specifically, the questionnaire contained items about the person receiving the act of kindness and the person performing the act of kindness within the vignette (i.e., intelligence, wealth, trustworthiness). The questionnaire also included general demographic information about the participants themselves.

Procedure

Each participant was randomly assigned to one of the vignette conditions. Participants took a research packet from a randomly mixed stack containing both conditions of vignettes. Participants were told that the study was about random acts of kindness and that they would be reading a short vignette and completing a questionnaire based on their impressions of the vignette.

Each participant read and signed a consent form, and then they were given a research packet. The first page of the research packet contained a short paragraph with instructions to read the scenario provided and then complete the short survey. The second page contained one of two vignettes (either a minor or major act of altruism), and the third page contained a questionnaire asking about their perceptions of what they had read. The critical dependent measures assessed the perceived gender of the individual performing the altruistic act and the perceived gender of the individual receiving the altruistic act. Gender perceptions were measured by asking people to indicate the likely gender of the target on a 1 to 8 semantic differential scale. This measure was used to give an indication of the degree of masculinity – femininity associated with the act described in the vignette. Several additional items assessed various opinions about the characters in the vignette. Upon completion of the questionnaire, participants turned in their packets and were given a debriefing form to read that further explained the experiment.

Results

Six of the 78 original subjects' data were discarded due to incomplete questionnaires. Within the semantic differential scales, multiple items were reverse scored and a series of correlations were run to see if the items on the semantic differential scales were related. In addition to the semantic differential about gender, the other items included: youthfulness, strength, kindness, trustworthiness, beauty, wealth, intelligence, and helpfulness. In general, the majority of the items were not related. As such, these items were excluded from further analysis.

Gender of Performer

To examine perceptions of the gender of the person performing the altruistic act, the data were analyzed two ways. First, the dichotomous items accessing gender of performer were examined. In the minor vignette condition 55% of participants indicated the performer was female. In the major vignette condition only 26.5% of participants

indicated the performer was female. The second analysis was run using the gender semantic differential data. This measure was used to indicate the degree of masculinity or femininity associated with the act. A 2 Participant Gender (female vs. male) x 2 Vignette Type (minor act of altruism vs. major act of altruism) between-subjects ANOVA was used.

Results revealed a main effect of Vignette Type, $F(1,68) = 6.303$, $p < .05$. Participants with the minor act of altruism vignette ($M = 4.11$, $SD = 2.447$) rated the performer to be female significantly more often than participants with the major act of altruism vignette ($M = 5.65$, $SD = 1.983$). There was no main effect of Rater Gender, $F(1,68) = 2.549$, $p = .115$. There was also no significant interaction of Rater Gender x Vignette Type, $F(1,68) = 2.303$, $p = .134$.

Gender of Receiver

To examine perceptions of the gender of the person receiving the altruistic act, the data were analyzed two ways. Once again, the dichotomous items accessing gender of receiver were examined. In the minor vignette condition 84.2% of participants indicated the receiver was female. In the major vignette condition 67.6% of participants indicated the receiver was female. The second analysis was run using the gender semantic differential data. This measure was used to indicate the degree of masculinity or femininity associated with the act. To examine perceptions of the gender of the person receiving the altruistic act the data were analyzed using a 2 (female vs. male) x 2 (minor act of altruism vs. major act of altruism) between subjects ANOVA.

Results revealed a main effect of Vignette Type, $F(1,68) = 9.032$, $p < .05$. Participants with the minor act of altruism vignette ($M = 2.34$, $SD = 1.512$) rated the receiver to be female, significantly more often than participants in the major act of altruism vignette ($M = 3.59$, $SD = 2.176$). There was no main effect of Rater Gender, $F(1,68) = .154$, $p = .696$.

There was a significant interaction of Rater Gender x Vignette Type on Gender of Receiver, $F(1,68) = 4.614$, $p < .05$. Follow up simple effects tests revealed that male raters perceived females to be the recipient of the minor altruistic act and perceived males to be the recipient of the extreme altruistic act, $F(1,68) = 12.45$, $p < .01$. There was no difference in perceptions for female raters (see Figure 1).

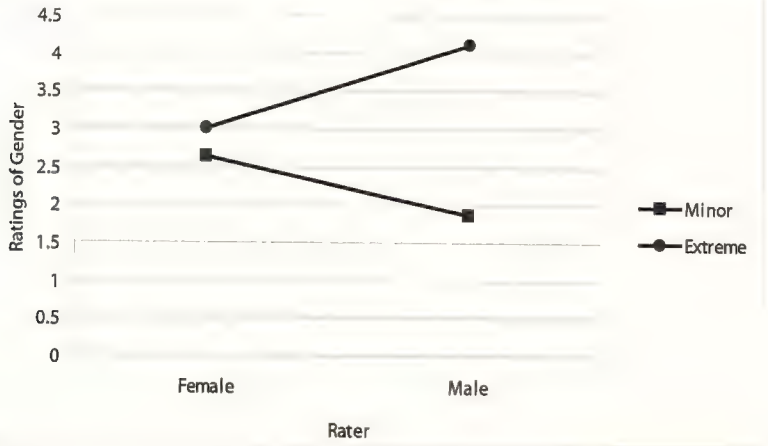

Figure 1. Perception of the Gender of the Person Receiving the Act of Altruism

Discussion

All of the major hypotheses for the study were supported. First, it was expected that people would be more likely to infer a person who committed an altruistic act was female. In the study overall, females were more frequently perceived as the performer of the altruistic act. The second hypothesis was supported in that people were more likely to infer a person who received an altruistic act was female. Overall, females were more frequently perceived as being the receiver of the altruistic act. The last hypothesis was that there would be a main effect for vignette type. Specifically, the more extreme act of altruism would be perceived to be made by a male character and the more minor act of altruism would be perceived to be made by a female character. This hypothesis was supported in the study because participants with the minor act rated the performer to be female significantly more often than those with the major act of altruism vignette.

One limitation to the study included the vignettes themselves. The researchers painstakingly attempted to create realistic vignettes that did not already have a gender stereotype connected with them. However, in the major act of altruism where a character pays for another characters meal at a drive in, there may have been a small amount of bias toward males for being the performer of the act because in American society, it is a stereotypical view for the male to pay for the female. Gender neutral scenarios were desired because if the scenarios were already too closely linked to a typical gender stereotype, then the results would have definitely shown a specific result; but the study was looking more at whether or not altruism as a whole had a gender stereotype bias. If this study were to be conducted again, extra effort would be taken to create gender neutral vignettes.

Another limitation to the study included the participants that had to be eliminated from the study due to incomplete questionnaires. This was partly due to some participants' unwillingness to select ratings based on their own perceptions. These individuals were thinking in terms of the "correct" answer so would simply put down on their questionnaire that the vignette did not say what the gender of the character was. Another reason for the incomplete questionnaires was because of the construct of the measure used. Some participants did not know there was a back to the questionnaire so they filled out the front but did not complete it. If this study were done again, a statement at the bottom of the sheet would simply instruct participants to turn the sheet over to finish their responses, or another solution would be to have the research packets change to a one-sided only format.

The last limitation that should be addressed was the measure used in general. The measure included two semantic differential scales with 8 options for rating. The problem with this scale is the fact that participants did not have an option to be neutral, and therefore either selected a higher or lower middle. Selecting a 4 on the scale would be weighted toward female, and selecting a 5 on the scale would be weighted toward male. This may have had some effect on the results simply because where they may have wished to select an option for being gender neutral in their views but were forced to choose a mid-rating that may have been unrepresentative of their intended response.

There are many possible studies that could be conducted in the future about gender stereotypes related to altruism. First, it was difficult to find previous studies that looked at the gender of the person who was receiving the altruistic act. While the author did look at this to some degree, a future direction of study could be to further explore what stereotypes are involved when it comes to the receiver of an altruistic act and whether or not it matters who the performer is. Another direction this research could be

taken is to take a closer look at the significant interaction that was found. Male raters perceived females to be the recipient of the minor altruistic act and perceived males to be the recipient of the extreme altruistic act, but what accounted for this? An additional study could look at why this occurred and why there was no difference in perception for female raters.

Researchers that pursue this area of study in the future should consider the construction of their vignettes and their measure before starting on a project such as this. They should attempt to create extremely realistic, gender neutral scenarios and should create multiple vignettes for each level. They should also consider the measure and consider a more neutral option if the participants sincerely did not have an opinion for the character gender in the vignettes presented.

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Overview of Knowledge Management in Organizations

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Key words: Knowledge Management, Organizational Culture, Organizational Structure

Abstract
This paper looked into the knowledge management from the organizational perspective. Author introduced definition of knowledge management, explicit knowledge and tacit knowledge, and three attributes of effective knowledge management—maturity, dynamic and self-growth. Subsequently, the author explained organizational culture and structure which can best support successful knowledge management by reviewing literatures and illustrating a knowledge enterprise model. To manage knowledge effectively, the organization should create a knowledge-sharing culture whose component is trust and consider it from four targets—interpersonal, group, organizational and institutional. Trust should go through the process of knowledge management, and emphasize trust to people and to knowledge content simultaneously. Organizational structure should facilitate knowledge sharing and be able to manage tacit knowledge. Also, it should align with organization strategies, fit the culture and lead to organization learning by using technology as an enabler.

Introduction to Knowledge Management

As the knowledge-based economy grows exponentially, the knowledge assets become invaluable to the organizations. Effective use of knowledge has been crucial to the organization's survival and success in competitive global markets and has a strong potential to problems solving, decision making, organizational performance enhancements and innovation. Effective use of knowledge, stated in a more academic way, is Knowledge Management. Knowledge Management defines a systematic, explicit and deliberated building processes required to manage knowledge, the purpose of which is to maximize an enterprise's knowledge-related effectiveness and create values (Bixler, &Stankosky, 2005). The process incorporated in KM includes collecting, organizing, clarifying, disseminating and reusing the information and knowledge throughout an organization. Dealing with knowledge is the main theme of KM. Knowledge has two types, explicit and tacit. Explicit knowledge can be articulated in formal language and transmitted among individuals; tacit knowledge involves more intangible factors and is personal knowledge embedded in individual experience (Frappaolo, 2002). Both explicit and tacit knowledge must create returns and solve today's problems within an organization.

Mastery of crucial and up-to-date knowledge for continuous organizational improvement is primary emphasis of KM. Successful KM has maturity, dynamic and self-growth attributes. Maturity attribute means KM should be strong enough to handle the turbulence in performance yet flexible to adapt to changes. Also, KM should align with the organizational policy, strategies, culture and structure, and provide an environment with well disciplined, value-added and relevant knowledge to generate and

introduce innovation and challenging ideas. Dynamic attribute means the information and knowledge flow should spread through the organization without barriers; everyone can approach and contribute to the knowledge assets. Self-growth attribute means, on one hand, KM should sense potentially valuable knowledge, capturing and storing it to increase organizational knowledge assets, and on the other hand it should create new knowledge based on what an organization already has had.

KM can profit organizations, for instance, leveraging the intellectual capital, utilizing knowledge assets, sustaining cutting-edge performance. Such as GE, Microsoft and Intel, their net worth incensement which can be attributed to KM up to 82%, 97% and 85% respectively (Frappaolo, 2002). In organizational perspective, creating culture and structure that can foster KM are the key points.

Knowledge Management and Organizational Culture

Organizational culture is a big factor impacting success of KM. KM should be supported in a knowledge-sharing culture, and trust is its most important component (Ford, 2001, & Figallo, 2002).Dianne Ford (2001) summarized trust into interpersonal, group, organizational and institutional targets (Figure 1).

Interpersonal trust	The "willingness of one person to increase his/her vulnerability to the actions of another person [e.g., Zand 1972]" (Aulakh, Kotabe & Sahay, 1996, p. 1007). Also defined as "generalized expectancy that the verbal statements of others can be relied upon" (Rotter, 1967, p. 651).
Group trust (Rousseau, et al., 1998)	The willingness of one person to increase his/her vulnerability to the actions of a group of people.
Organizational trust	"Organizational trust is a feeling of confidence and support in an employer… organizational trust refers to employee faith in corporate goal attainment and organizational leaders, and to the belief that ultimately, organizational action will prove beneficial for employees" (Gilbert & Li-Ping Tang, 1998, p. 322).
Institutional trust	Institutional trust is a feeling of confidence and security in institutions (e.g., the law, organizations), that the laws, policies, regulations, etc. are to protect the individual's rights, and will not harm her/him.

Figure 1. Trust Targets (Ford, 2001, p. 31)

Trust is the channel through which the knowledge can be exchanged smoothly. High level of trust in organizational culture can facilitate knowledge sharing, particularly tacit knowledge. Because sharing knowledge is a risky action, people are more inclined to conceal what they have known if they are uncertain with outcome of sharing. So building trust is the first step to effective KM. In KM, trust entails trust to people and trust to the knowledge content itself. Trust to people is a key element promoting collaborative and participative culture in the organization, which can break down the barriers to the knowledge sharing. Trust to knowledge content will increase the credibility of knowledge, which can make people use knowledge without concerns and improve the trust to other people immediately.

Researchers also pointed other components of knowledge-sharing culture, like ownership of knowledge and liability (Frappaolo, 2002) Ownership of knowledge can be categorized into organizational trust. As defined in Table 1, it more stresses what the organization can do for the employees. The organization should support the employees' work, provide necessary knowledge required to accomplish the task, be receptive to criticism, and encourage truth. The knowledge assets do not only belong to the leaders. It should be shared with everyone in the organization. All the members have the right to own and retrieve the knowledge assets. Furthermore, the organization should created an atmosphere which make employees feel the equal access to knowledge assets and responsible for making contribution. Participative leadership, open communication and knowledge reward can be the means to increase the organization trust. As far as liability, it can be categorized into institutional trust. Liability plays an important role in knowledge security, especially in inter-organizational setting where scope of knowledge exchange often reaches to a large market (Ford, 2001, &Frappaolo, 2002). The knowledge sharing between organizations needs more trust to drive the knowledge exchange and also more protection on security. Trustable laws, policies and regulations are powerful tools to protect people's right and to ensure no harmful impact of knowledge sharing action. And most of time, shared knowledge is not present in a neat and official format, so under control of laws and policies will make it more convincible and avoid problems (Figallo, 2002).

Interpersonal trust, group trust, organizational trust and institutional trust are interdependent throughout the KM process and do not necessarily begin with interpersonal trust (Ford, 2001). Trust is essential to the organizational culture, not only in KM, but in all managerial function leading to organization's success. Organizations should reward knowledge contribution and encourage learning. As the key component of knowledge sharing culture, trust is the ground of knowledge-related action in an organization.

Knowledge Management and Organizational Structure

Another issue regarding effective KM is organizational structure. To better implement KM, some organizations place the positions entitled with, for instance, chief knowledge officer (CKO), knowledge engineer, knowledge analyst, knowledge manager, knowledge steward to administrate knowledge management (KM). And along with the development of information technology (IT), Knowledge Management System (KMS) has been integrated in organizational structure to assist in managing knowledge through intranet or internet. Figure 2 shows organization structure which can support KM.

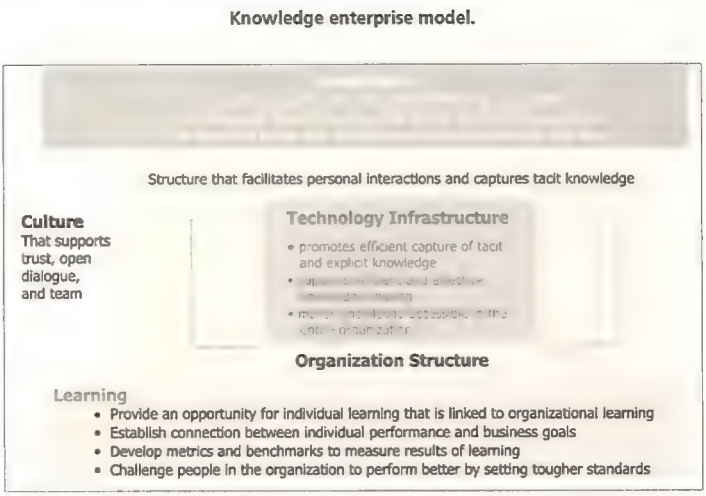

Figure 2. Knowledge enterprise mode (Anantatmula, &Stankoshy, 2005, p.174)

From Figure 2:

1. *Major issues in organizational structure are interaction and strength on tacit knowledge.*

The organization structure should be networked to provide opportunities for employees to interact and communicate with others, and support knowledge- related actions. Because it is intangible and more relevant to personal feelings, managing tacit knowledge is more difficult than explicit knowledge. Organization structure should be able to handle tacit knowledge, and change it into explicit knowledge if necessary.

2. *Technology is only an enabler.*

Because of advanced information technology, knowledge management systems, expert systems, knowledge base systems and other high-tech products are available for organizations to manage knowledge. Technology is merely a tool. Human factor is the key to effective and efficient KM.

3. *Organizational structure should align with the strategies and fit in a trust and open culture environment.*

Organizational structure should be in line with the organization strategies, goals, mission and vision, and encourage employee to learn. In the organizational structure, there should be a connection between individual improvement and organization improvement. System thinking approaches should be integrated into the structure.

4. *Organizational structure should result in organization learning.*

Organization learning is a broad topic. Here just list some suggestions that may help in organization learning:

- Provide continuous learning opportunities.
- Use learning to reach their goals.
- Link individual performance with organizational performance.
- Foster inquiry and dialogue, making it safe for people to share openly and take risks.
- Embrace creative tension as a source of energy and renewal.
- Are continuously aware of and interact with their environment.

(Kerka,1995)

Conclusion

Knowledge Management is a systematical process which includes collecting, organizing, clarifying, disseminating and reusing the information and knowledge throughout an organization. KM deals with explicit knowledge and tacit knowledge and should possess maturity attribute, dynamic attribute and self-growth attribute. Successful KM needs a trust-based organizational culture to facilitate knowledge sharing and should be supported by an organization structure which can result in organization learning and fits in the trust and open cultural environment.

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Family Support: What It Means To Male Inmates

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Keywords: family, inmates, support, incarceration

Abstract

Family support for incarcerated individuals is an important issue that receives little consideration in society even though it may be one of the greatest factors for change in the jail system for combating recidivism rates. This study investigated the attitudes of 44 male inmates regarding family support while incarcerated in a Midwestern Wisconsin jail. It was hypothesized that increased family support of inmates while incarcerated would have a positive effect on the inmates and their behavior. Survey data was analyzed using frequencies and a reliability analysis. Results indicated that family support had significant effects on inmates while incarcerated. It was also found that overall conditions of the family interactions for the individuals that are incarcerated were unsatisfactory. Based on these findings, it is important for people to recognize that incarcerated individuals benefit from support from their family and jail environment while incarcerated. Implications for practitioners and future researchers include a need for greater efforts towards awareness and education of family involvement with inmates. It would also be helpful to improve the incorporation of family support for jail systems.

> We get to visit our family 20 min. only 3 times a week. Now do you think that is enough time to spend with your family? The environment we visit our family in is very disturbing and has no privacy. We can hear other family's conversations and we have to yell just to hear one another. My family has a big influence and should be able to have more visiting time. It would help time a lot more.
>
> - (Anonymous inmate from authors' study)

According to Homer (1979) and Jorgensen (1986), incarceration causes traumatic separation leading to family estrangement, and theorists assert that the loss of a family member to prison is even more demoralizing to wives and children than a loss resulting from death (as cited in Carlson and Cervera 1991). According to Arditti (2003), the United States held the record for the highest number of incarcerated individuals, and at least ten million children in the year 2003 had a parent involved in the criminal justice system (as cited in Reed & Reed, 1998; Seymour, 2001). For the purpose of this study, family support is defined, as "the relationship between individuals where contact is frequent through in person interactions, phone calls, letters, and emotional support is an important and significant factor." The relationship must be beneficial to both parties (DeGenova & Rice, 2002). The authors researched the literature regarding family involvement with inmates and how that relationship affected the behavior of inmates. The authors also surveyed the male inmate perspective, ages 18 and above, regarding this

issue. The purpose of this study was to examine the male inmate perspectives on family support during the incarceration period.

In researching what environmental effects may have on incarcerated individuals upon release, the authors looked at the extent of family involvement during the incarceration period. Concerning family involvement in the corrections system, it is essential to utilize other researchers' findings in order to build further accurate research. Relevant literature focused on social support as an important factor for incarcerated individuals, especially when referred to as "family." The literature suggested that there was more clarity and information needed in relation to social support for incarcerated individuals. The articles researched discussed family involvement as being a large factor in rehabilitation. Therefore, the authors' rationale for using the Carlson and Cervera article was that there is little research surrounding the research question and this article had the main idea that a family thrives when they can adapt to stress with competent coping skills (Staton-Tindall, Royse, & Luekfeld, 2007; Freudenberg, Daniels, Crum, Perkins, & Richie, 2005; Arditti, 2003; Carlson & Cervera, 1991).

Staton-Tindall, Royse, and Luekfeld (2007) found that incarcerated women's view of social support was not dependent upon their criminal behavior but actually on the length of time they are incarcerated and away from their family. Staton-Tindall, Royse, and Luekfeld concluded that, because a majority of incarcerated women may not have solid supportive relationships, steps need to be taken to better understand the difference of perception regarding social support. These steps are important because it is likely that social support is associated with negative behaviors.

Freudenberg, Daniels, Crum, Perkins, and Richie (2005) found that in adult women, peer support has a positive influence on the decision toward further drug use/ re-offenses. These findings were not the same when compared to adolescent males; researchers found that the more peer support an adolescent male has, the more negative influences they have on their behaviors.

Arditti (2003) found that visitation seems to have both negative and positive effects for families. It provides an outlet for connection as well as a barrier to feelings of separation. The authors also suggested that contact visiting was essential for maintaining bonds with incarcerated individuals and their families. Contact visiting includes face-to-face and physical contact. Carlson and Cervera (1991) found that the best predictor of a successful release from prison (not re-offending) was having a stable and supportive family environment to which the inmate will return. The study found that the incarceration period is an extremely stressful experience, and the stress is best alleviated through support from significant others. Although couples in this study coped fairly well, there were signs they could have used some further assistance (as cited in Carlson & Cervera 1991).

According to the literature, social support was a major factor for incarcerated individuals regarding their success upon release. Family is the most influential type of social support. As a result, further research is needed on this topic; the incarcerated population is underrepresented in today's society. It is important to have and utilize this information in an effort to keep jails safe and decrease the number of inmates. It is important in further research to work with the inmates directly because this gives an opportunity for inmates to voice their needs and concerns regarding family relationships and the affect it has on them during their incarceration.

Family Systems Theory, as described by Broderick and Smith (1979), describes the different subsystems that exist in the family, for example the role of mother, father,

sister, brother, etc. Within the family, each of these subsystems has an effect on the other subsystems because the family is a unit of interrelated parts (as cited in DeGenova and Rice, 2002). Homeostasis is the main goal for the family in order to achieve and maintain harmony according to the Family Systems Theory (as cited in DeGenova and Rice, 2002). This study predicts that the actions of the other family members toward the incarcerated individual will have an effect on the inmate's perception of their sentence and chance of re-offending.

The purpose of this study was to examine the male inmate perspectives on family support during the incarceration period. The male population of the jail the authors' surveyed was considerably greater than the female population. It is the authors' hope that correction officers, correction program coordinators, jail administrators, social workers, and students will use the results from this study to improve the conditions in jails, to facilitate family support, and ultimately to decrease the recidivism rate. The central research question in this study was: "What is the male inmate perspective of family support during the period of incarceration"? The authors hypothesized that inmates would score higher on variables with a general family support emphasis and score lower on variables having to do with jail environmental support for visitation. We predicted these outcomes because, according to the Family Systems theory, the subsystem's actions have an effect on the entire system. Literature also found some positive evidence regarding strong social support and rehabilitation.

Method

Participants

The site of this study was at a Midwestern Wisconsin county jail. The participants included 44 male inmates ranging from 18 through 65 years of age. Of the 44 participants 17 were between the ages of 18 and 25, 12 were between the ages of 26 and 35, 12 were between the ages of 36 and 45, three were between the ages of 46 and 65, and zero were 66 or older.

Research Design

The purpose of this survey was to generalize the results of this analysis to a larger population. . This study utilized a cross-sectional design and employed purposive sampling in order to gather information from a specific set of individuals who were incarcerated. Data was collected via self-administered questionnaires because this method allowed for quick return of data. The ethical protection of human subjects was provided by completing the Human Subjects Institutional Review Board (IRB) training; our study was approved by the IRB.

Data Collection Instrument

In order to collect information regarding family support and inmates, the authors designed a survey. The survey included a cover letter with an implied consent statement, a description of the study, definitions of any terms not commonly known, potential risks and benefits, estimated time commitment, confidentiality procedures, voluntary participation information, contact information of the research team and the supervisor, and instructions for completing the survey.

The survey consisted of one demographic question relating to age. Participants were then given ten closed-ended statements based on a 5-point Likert scale which measured the intensity of the respondents' attitudes ranging from one (strongly disagree)

to five (strongly agree). Questions were based on literature and theory regarding what factors relate to attitudes regarding family support and inmates.

The survey instrument had both face validity and content validity. Because the questions and concepts addressed in the survey were literature inspired, the authors felt the questions clearly connected to the larger issue of family support and inmates, and the authors feel this demonstrates adequate face validity. The questions addressed a broad range of issues regarding family support and inmates and demonstrate adequate content validity. To ensure the survey was understandable, it was piloted to five undergraduate students. Feedback indicated that the survey was clear and ready for distribution.

Procedure

The authors initially contacted the Jail Administrator to ask for permission to collect data but were referred to a second Sergeant contact who acted as the liaison throughout the research process. The Sergeant at the jail asked inmates if they would like to voluntarily participate in the survey prior to the authors' arrival and then gathered willing participants together at the predetermined date and time. The authors introduced themselves and read the consent form, emphasizing that inmates' participation was not mandatory and that they could withdraw at any time. The authors offered reading assistance when needed, discussed the importance of their participation, and thanked them for their time. The authors instructed participants to detach and keep the informed consent information and answer the survey. When finished, participants were instructed to hand in their surveys, pens, and staples to ensure safety and to cooperate with the jail's regulations. The authors then thanked participants again for their time and reminded them that they could withdraw at anytime. Completed surveys were stored in a secure location until data analysis.

Data Analysis Plan

The first question on the survey was a demographic variable: age. The data was first cleaned and then coded using acronyms for each variable as given in the following figure:

REL	to determine if the inmate's relationship with his family was important during his incarceration period
TIM	if the amount of time spent each week with the inmate's family while incarcerated was satisfactory
CON	if the area provided for visitation was adequate for the inmate's family and his needs
PVY	if family visits were in a confidential setting
BEV	if being able to interact with his family while incarcerated improved his behavior
TRT	if he and his family were treated respectfully during visiting opportunities
EMN	if after interacting with his family he was more hopeful
AJS	if he appreciated the assistance offered by the jail staff to help him and his family cope with the separation
NUM	if the number of family members he gets to see at any one time was acceptable
QUA	and if the time he spent with his family was found to be worthwhile quality time

Figure 1. Variable abbreviations and definitions

The individual was used as our level of analysis. Data analysis included a frequency analysis and a reliability analysis.

Results

Each variable was subjected to frequency distribution analysis. Results indicated that there was no missing data. A reliability analysis was run to indicate if the ten questions were a reliable index to measure the major concept: family support during the period of incarceration. A Chronbach's Alpha value of .66 indicated that the survey questions were a reliable measure of male inmates' perspectives of family support during the period of incarceration. We received qualitative comments at the end of a number of our surveys. These comments will be analyzed and themes determined in our Discussion section.

Table 1

Inmate Responses by Percentage

Information	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Inmate's relationship with his family during his incarceration period	2.3%	4.5%	4.5%	15.9%	72.7%
The amount of time spent each week with the inmate's family while incarcerated was satisfactory	36.4%	20.5%	15.9%	15.9%	11.4%
The area provided for visitation was adequate for the inmate's family and his needs	22.7%	20.5%	31.8%	20.5%	4.5%
Family visits were in a confidential setting	18.2%	22.7%	29.5%	25.0%	4.5%
Being able to interact with his family while incarcerated improved his behavior	4.5%	0.0%	6.8%	25.0%	63.6%
He and his family were treated respectfully during visiting opportunities	2.3%	2.3%	27.3%	34.1%	34.1%
After interacting with his family he was more hopeful	0.0%	2.3%	13.6%	31.8%	52.3%
He appreciated the assistance offered by the jail staff to help him and his family cope with the separation	9.1%	15.9%	38.6%	27.3%	9.1%
The number of family members he gets to see at any one time was acceptable	20.5%	31.8%	15.9%	18.2%	13.6%
The time he spent with his family was found to be worthwhile quality time	2.3%	11.4%	15.9%	22.7%	47.7%

Discussion

Overall, results supported the hypothesis that inmates would report higher/ positive statements regarding family support variables and report lower/ negative statements towards variables having to do with jail environmental support for visitation.. This could be the result of a variety of factors such as funding, space in facility, and staff knowledge and training. The authors will first discuss each dependent variable in terms of how the results either agreed or disagreed with the literature and/ theoretical framework and then address limitations to the study, implications for practitioners, implications for future research, and concluding remarks.

Results showed that more respondents agreed than disagreed that their relationship with their family was important to them during their incarceration period; this supported literature indicating that a solid family relationship is the best predictor of successful release from prison (Carlson & Cervera, 1991).

A majority of respondents disagreed that the amount of time spent each week with their family while incarcerated was satisfactory. This correlated with literature that found that lack of physical contact, lack of privacy, long waits, short visits, poor environmental conditions, and disrespectful treatment by jail staff contributed to the small number and low quality of visitations (Arditti, 2003). Mixed support was shown regarding the area provided for visitation meeting the inmates' needs. The Literature indicated that the environment provided for visitation was not adequate. The authors found that the majority of the inmates surveyed were satisfied with the conditions the visitations were held in. Researchers within the literature found that the area was not conducive for physical touching of the inmate and that privacy was not up to standards of the family and inmate (Arditti, 2003).

This mixed support may be due to the language used in the question, particularly regarding the word "adequate." The authors feel that some additional help with the definition of the words may have been needed. These conclusions were made after observing the inmates during the survey and communicating with jail staff. Mixed support was also shown regarding the visits being in a confidential setting, and again literature found that the family and inmates felt discomfort with the privacy of the setting (Arditti, 2003). This mixed support may have been due to the language used in the question, particularly regarding the words "confidential setting" and the understanding of their meaning. A majority of our respondents agreed that being able to interact with their family while incarcerated improved their behavior, which was supported in the literature (Staton-Tindall, Royse, & Luekfeld, 2007). Interestingly, results showed that more respondents agreed that they and their family were treated respectfully during visits. This finding was not in agreement with literature, which indicated that participants felt as though they were not treated respectfully while in the facility. A majority of respondents agreed that, after interacting with their family, they were more hopeful. This finding support literature as well (Carlson & Cervera, 1991).

There was mixed support regarding the assistance offered by the jail staff to help the inmates and their families cope with the separation 25% either strongly disagreed or disagreed while 36% strongly agreed or agreed. The literature found that the relationship between the family and inmate was essential to their success (Carlson & Cervera, 1991). This mixed support may have been due to the language used in the question particularly regarding the word "assistance" and the understanding of its meaning. The authors felt as though they could have given a definition and example as to what "assistance" from the staff they were referring to that would have given the inmates an idea of how to

better express their answers. A majority of respondents disagreed that the number of family members they get to see at any one time is acceptable. Lastly, a majority of the respondents agreed that the time spent with their family was worthwhile, quality time. This was supported in the literature which found that 18% of potential visitors did not want to visit at all because the visiting conditions and the lack of actual physical contact decreased the quality of the visits too much (Arditti, 2003).

Qualitative comments targeted visitation time and the amount of family members allowed, age limitations of visitors, and other special requests. Regarding amount of time allotted for visitation, inmates expressed the need for extended time - especially involving family members that had to travel great distances in order to visit. The number of family members allowed on the inmates list was reported to be too few. The inmates also stated that the age limit for visitors (12 years of age) sometimes prohibited them from seeing their own children. A few other requests included internet conferences with family members who are overseas fighting in Iraq and for visitors unable to travel for visitations.

Limitations

A small sample size inhibits the authors' ability to generalize to the larger population of male inmates in county jails across the country. Another limitation was the authors' inability to randomly select participants due to the limited number of eligible participants. Other limitations of this study were due to the location of the jail, being that it is in a small rural county in Wisconsin.

Implications for Practitioners

Results showed that there is a need to inform correction officers, correction program coordinators, jail administrators, social workers, the justice system, and students about family support and what it means to male inmates. Practitioners should be aware of the positive effects of family visitation and the likelihood that positive family support both in and out of jail could potentially lead to lower rates of recidivism. Practitioners can learn about these issues via conferences, seminars, educational programs, university classes. Group demonstrations with jail staff that allow for hands on learning regarding inmate care and create a conducive atmosphere for family interactions. Education will support the inmates' relationship with their families and improve behavior while incarcerated. The authors also recommend specific training regarding family support and its effect on the inmate.

Implications for Future Research

The authors recommend that the next step of research use a larger and more random sample in order to generalize to the larger population. In addition, it would be beneficial to compare male inmates with female inmates in order to see differences that may exist between genders. If differences are found, this might imply different approaches to the issue would be needed. Given that this population is vulnerable and inaccessible, research would greatly benefit from a qualitative study that would allow in-depth, specialized information allowing the inmates to expand on their answers giving them a stronger voice. If this study were to be replicated, the authors suggest rewording or giving examples of and better defining words found in *CON, PVY,* and *AJS.*

Conclusion

As a result of this study, the authors hope that correction officers, correction program coordinators, jail administrators, the justice system, social workers, and students will recognize the need for family support and the need for jail environmental support regarding visitation. This is an issue that both inmates and literature indicate needs to be improved, studied, and addressed. In conclusion, the authors believe one of the participants of this study said it best:

> Without family support majority of the hope one has fades over time. Family also does the time with you and sometimes it is harder for them even though there (sic) not behind the bars. I believe there should be more programs/ interactions with family/community in order to successfully reintegrate out.
>
> - (Anonymous inmate)

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VMware Virtualization and Software Development

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Keywords: Virtualization, VMware, Performance Testing

Abstract

Virtualization technology has recently matured to the point where it can be used dependably on a daily basis by anyone. Computer virtualization is the idea of running virtual computer(s) inside of a physical host computer. The basic idea behind the technology is not difficult to understand, but understanding how the technology is implemented is more complicated. In this paper, the basic ideas behind general virtualization are conveyed through VMware's technology. VMware is a company that is on the cutting edge of this technology and they offer many different virtualization solutions for free and for purchase. Through benchmark testing, it can be shown that current virtualization technology is on par with physical PC technology. This means that the performance decline incurred by using a VM (virtual machine) is very minimal, and it is getting smaller by the day.

Introduction

Computer virtualization technology has now matured to the point where a virtual personal computer (PC) can be just as effective as a real PC for many different reasons and applications. This study of virtualization technology is mainly from the viewpoint of a software developer. The main appeal of virtualization to a developer is the ability to test and develop software on various operating systems (OS) while only using one host computer. This allows for testing software on various platforms easily and transparently. Throughout this paper the following will be presented: an overview of what virtualization is, the common terms associated with virtualization, an overview of VMware applications and the technologies, the advantages to the software developer, performance testing baselines, and the results of performance testing. For the previously mentioned performance testing, the author will be applying his knowledge of the programming language Java on the popular Linux distribution Ubuntu and on Windows XP using both as virtual PCs and as standalone PCs.

Although much of the content in this paper applies to all of the major virtualization products such as Parallels and Microsoft Virtual PC, the author has chosen to focus on VMware, because they control a sizeable part of the virtualization market. According to a study of the market by InfoWorld in 2006, VMware is the clear market leader and will control over half of the market for the near future (Marshall, Survey Suggests Server Virtualization Catching On, 2006). VMware is considered to be the grandfather of the current resurgence of virtualization technologies since releasing the popular VMware Workstation in 1999 (VMware, About Us Home, 2007). VMware is also on the cutting edge of VM (virtual machine) speed because they have developed technology that executes code directly on the processor whenever possible and can dynamically rewrite instructions when direct code execution is not possible (Mittell

& Hutchings, 2006). The final reason for choosing VMware is that they offer free virtualization products which allows for easier testing of their products. The main product the author did his testing on is called VMware server, which allows the creation and using of VMs. The software can be downloaded free at

. They also offer other free technologies such as VMware converter, which allows users to convert any physical PC into a virtual PC, and VMware player, which is a lightweight application that allows users to boot VMware images created in any other VMware application.

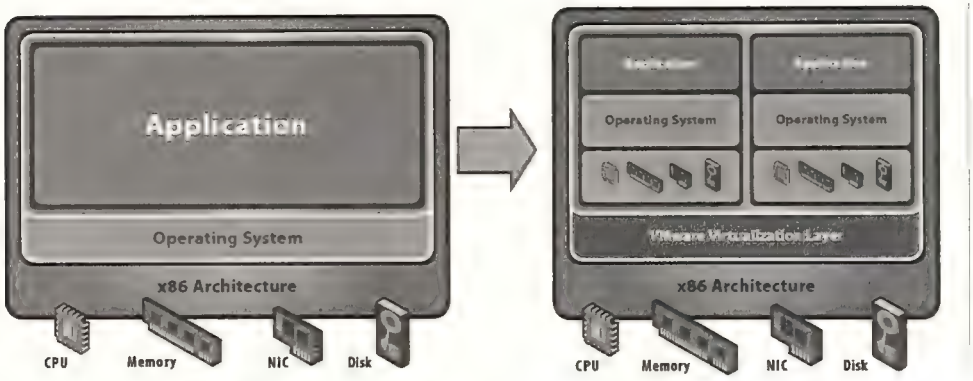

Figure 1. A physical PC (left) and a PC with two virtual PCs within a physical PC (Image Credit: "Virtualization Overview")

What is Virtualization?

The word virtualization generally means "an abstraction of resources" (Hammersley, 2007, p. 2). In the context of this paper, the word virtualization is used in the context of software virtualization. Software virtualization "is a process in which the actual physical hardware of a machine is decoupled, or abstracted … from the underlying operating system by means of software" (Hammersley, 2007, p. 2). The decoupled machine still thinks it is running in a physical environment, but there is actually software in between the decoupled virtual hardware and the physical hardware. Depending on the amount of resources available on the physical PC, there can be multiple virtual PCs within one physical PC. Figure 1 shows a normal physical PC (left) and another PC with two virtual PCs within a physical PC.

There are many advantages to integrating a virtual infrastructure within a physical computer system over using a purely physical infrastructure. According to VMware Inc., in the old system of using only a physical based system, there is "one physical operating system per machine, the software and hardware tightly coupled, running multiple applications on the same machine often creates conflict, resources are underutilized, and the infrastructure becomes inflexible and costly" (VMware, Virtualization Overview, 2006). Conversely, according to VMware Inc., the new virtualized infrastructure offers much more: "hardware-independence of operating system and applications, VMs can be provisioned to any system, and a user can manage OS and application as a single unit by encapsulating them into VMs" (VMware, Virtualization Overview, 2006).

Terms and Definitions

Here is a guide to common terms that will be used in this paper in regards to virtualization.

Abstraction Layer: The process of separating hardware functionality from the underlying hardware is called abstraction (Wolf & Halter, 2005, p. 2). The abstraction layer is responsible for mapping the guest OS's virtualized hardware to the host's physical hardware. This abstraction layer essentially turns the guest computer into a piece of software that can be run on a host PC as a process (Wolf & Halter, 2005, p. 2).This allows a guest OS to be moved from computer to computer without effecting the new host PC or the moved guest OS.

C++: A general-purpose, high-level programming language with low-level facilities. Since the 1990s, C++ has been one of the most popular commercial programming languages. It was developed in 1983 by Bjarne Stroustrup as an enhancement to the C programming language (AT&T, 2008). In the future the author plans on performance testing C++ in a virtual setting, along with the Java testing the author recently completed.

Guest: This refers to the VM and operating system running inside VMware. Under VMware, each host system may have several guest systems. Guest operating system refers to only the operating system on the guest system, while guest PC refers to the virtual computer as a whole (Ward, 2002, p. 6). Both the guest OS and the host PC are referred to as the guest to simplify the terminology._

Hard Drive: A type of data storage that takes the form of digitally encoded data on rapidly rotating platters (Brain, 2000). Computers use hard drives as the main storage and recovery of data. This will be one of the main focuses of the performance testing, comparing the virtual guest hard drive speed with the physical hard drive speed.

Host: The host machine is the physical machine itself. It is the machine where a virtualization product, such as VMware Server, can be installed. The host operating system is what is installed on the physical host machine (Hammersley, 2007, p. 6). Both the host OS and the host PC are referred to as the host to simplify the terminology.

Java: "An object-oriented programming language developed by Sun Microsystems in the early 1990s. Java applications are compiled to byte code, which at runtime is either interpreted or compiled to native machine code for execution" (Patent Storm, 2000). This is the language in which the author is doing all of his current VMware performance testing.

Network Interface Card (NIC): The NIC is a piece of hardware that allows computers to communicate over a network. This will be one of the main focuses of the performance testing, comparing the virtual guest NIC with the physical NIC.

Physical Hardware: The physical hardware is the hardware on the physical PC that the host OS has direct access to. The main focusing of the performance testing is on the processor, hard drive, and NIC.

Processor: The component in a digital computer that interprets computer program instructions and processes data. This will be one of the main focuses of the performance testing, comparing the virtual guest processor speed with the physical processor speed.

Structured Query Language (SQL): A language designed for retrieving and modifying data in a computer database. SQL data retrieval over a network is what the author is using for testing NIC performance.

Ubuntu: A free and open source operating system for PCs. It is a widely used Linux distribution which is very easy to use and set up compared to other Linux distributions. The author chose Ubuntu as one of the operating systems to run performance testing on along with Windows XP Home Edition because of its ease of installation and popularity.

Virtual Hardware: This is the virtual counterpart of the physical hardware. The guest PC sees what it thinks is physical hardware, but is really virtual hardware translated from the abstraction layer. The guest has direct access to the virtual hardware. The main focus of the author's performance testing on the guest is with the processor, hard drive, and NIC.

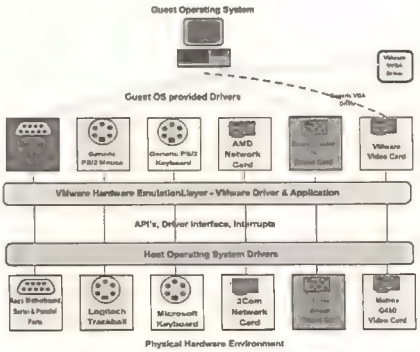

Figure 2. An overview of how the generic guest drivers communicate to the host's physical hardware through the abstraction layer. (Image Credit: Munro, 2001)

VMware Server: Software that creates a virtualized environment between the computer platform and its operating system, so that the end user can operate software on an abstract machine.

Windows XP: An operating system designed to be versatile enough to be intuitive for the home and business user. Windows XP is the most popular operating system in the world, and is relatively easy to set up and use. Along with Ubuntu, the author will be using Windows XP for performance testing virtualization.

Overview of VMware and Virtual Hardware

The basic ideas behind VMware are common to other virtualization products in the market, such as Parallels or Microsoft Virtual PC. The virtualization abstraction layer provides generic drivers to the guest, while the same layer communicates with the host's hardware and passes the hardware input and output to the guest drivers. When a PC is running a VM, the host OS and the guest OS are thought of as two "worlds" (Munro, 2001). The virtual world can communicate directly to the processor or to the host's other hardware through the abstraction layer (Called the Emulation Layer in Figure 2). When a so called "world switch" occurs between the host and guest, a decline in performance can occur (Munro, 2001). "Any time a VM accesses an I/O (input/output) device, it gets a decline in performance from a world switch. For a keyboard or mouse, this is not a major problem because they are very short duration and low processing overhead events. However, for high throughput devices such as a network controller, the overhead can become a problem" (Munro, 2001). The people at VMware have developed very unique methods of trying to combat the overhead a NIC or a USB device can cause. They have developed a unique virtual machine monitor (VMM), which "understands the context in

which I/O requests are made, and uses that knowledge to reduce world switches" (Munro, 2001). Figure 2 gives an overview of how the generic guest drivers communicate to the host's physical hardware through the abstraction layer.

The hardware components focused on during testing are the hard drive, the NIC, and the processor. The main reason for focusing on these components is because they are common to every computer and these are three of the four components that determine the performance of any computer, physical or virtual. The fourth component is the memory (RAM). The author will not be focusing on the RAM outright because the RAM is being used and accessed as a part of the other tests, so the author did not feel that it needed to be singled out. The VM can easily be configured to have more or less RAM, so the author has set a base of 512 MB of RAM for all testing.

Setting up and Running a Virtual Machine in VMware

The process of setting up a VM in VMware is identical to setting up a physical computer after installing the VMware software. The first step is to go to , and download the free VMware Server. Once it is downloaded for either Linux or Windows, it should be installed by running the executable in Windows, or by extracting and running the installation file in Linux. The process will install all of the drivers and software to have VMware server run. Once the installation is completed, the user runs the VMware Server Console and connects to the local host.

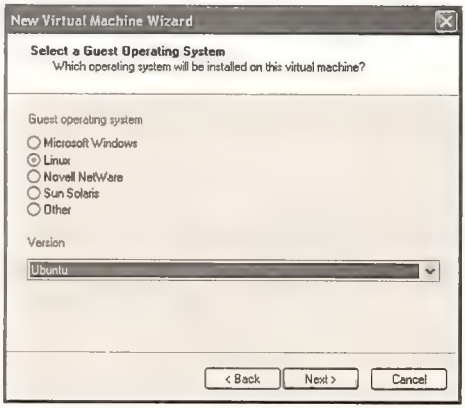

Figure 3. Selecting the operating system to install on the guest

The next step is to create a new VM using the "New Virtual Machine" wizard. This will bring up the wizard where the user will be prompted to select the operating system they want to install in the new VM (Figure 3). Selecting the operating system the user is going to install is important, because VMware will set up the optimal settings for that OS. The user is then given options about how they want the networking to be implemented and how big they want the virtual hard disk to be. One of the best features about the virtual hard disk is that the space can be allocated for virtual hard disk dynamically as more space is needed just by unchecking the "allocate all disk space now" box. Then all the user has to do is place the install disk for the operating system they chose earlier into the physical DVD/CD drive. Then the user clicks "Start this virtual machine" and the virtual PC will boot (Figure 4) just like a regular computer and the operating system can easily be installed on the virtual hard drive. Then once the system is installed, the virtual computer can be booted, suspended, and shut down just like a physical computer. Figure 5 shows an example of Ubuntu running in a VM on Windows XP.

Figure 4. The start of the VMware booting sequence

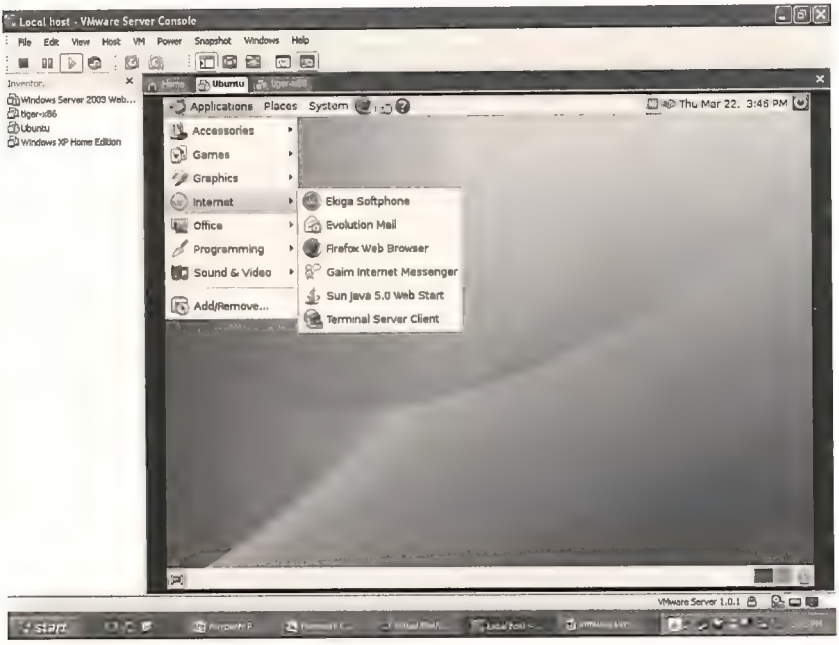

Figure 5. Ubuntu Running in a VM on Windows XP

Virtualization and the Software Developer

As stated in the beginning of this article, the author is using the VMware software from the viewpoint of a software developer. There are many features of VMware that make it a great solution for testing and running software in a real world environment. One of the goals of a software developer is to develop software to run on many different operating systems while giving the user the same experiences no matter the OS in which it is run. By using VMware, the developer can take advantage of running multiple operating systems, as any x86 based operating system can be installed in a VM. The family of x86 operating systems includes any version of Windows, many versions of Linux, Solaris, FreeBSD, and many more. The ease of having any operating system at the developer's disposal can save a lot of time and money. There can be many operating systems on one computer instead of many computers with one operating system. Another feature that is very beneficial to the software developer is the ability to take "snapshots" of the guest operating system. These snapshots save the exact state of everything in the VM. Then, at a later time, the user can revert back to the snapshot whenever they choose. This means that a software developer can do anything to a virtual computer and always go back to a previous state of their choosing. The last feature is the ability to "pause" a VM, so a developer can easily resume the guest operating system at any point in the future without having to shutdown the virtual PC.

A unique thing about the virtual computer is that what the guest sees as a hard drive is actually just a file on the host. A full computer is encapsulated into this one file on the host computer. This means that no partitioning needs to be done to set it up, which is different than if two operating systems were going to be installed on the same physical computer. The encapsulation allows the ability to copy VMs to other hosts. This can

be done since the VM is hardware independent, only depending on the generic drivers the abstraction layer provides. This portability allows flexibility in testing different configurations between the guest and the host. The guest will have no idea it has been moved, and will boot exactly the same as it did on the previous computer. Finally, encapsulation allows isolation, which means that the guest is isolated from other guest operating systems and the host operating system. This means that each guest has its own registry and file system. By having this virtual barrier between the guest and the host, if something such as a virus or other problem is present in the guest, it does not affect the host. The guest can then either be reverted or deleted, and the problem will be completely gone.

One good example of a possible usage of VMware here at UW-Stout is in the Data Structures class. Most of the course is taught in C++ and therefore the professor usually requires the use of Linux, since many Linux distributions have C++ compilers built into them. This also gives the Data Structures student exposure to the Linux OS. Because the laptops that the students use here are university issued, many students are reluctant to partition the hard drive and install another operating system. They are wary of causing some sort of damage to the current Windows XP system and all of their documents and files. By using a Linux distribution installed in a VM, students could use the built in C++ compiler, without having to worry about damaging their laptops in any way. The professor could actually have a preconfigured Linux VM and then distribute the VMware file with the virtual Linux installed on it to the students. Then this file could be booted through VMware just like a physical Linux installation. This would also ensure that each student would have a duplicate experience.

Performance Testing Baselines

The main reason for this performance testing is to show whether or not it is viable to run a VM as a testing/developing environment for the software developer. A software developer needs to test various configurations for their programs, so being able to use VMs seems to be ideal. Through performance testing the author plans to determine whether this is the case.

Before explaining the tests run on the virtual and host hardware, these are the processor speeds and RAM allotments of the host PC and the guest PC that were subjected to tests, as each computer sees: The host PC sees a 1.73 GHz processor and 2.00 GB of RAM and the guest PC sees a 1.73 GHZ processor and 512 MB of RAM. The difference in the RAM is because the guest actually gets allocated 512 MB (or as specified) of the 2.00 GB of the host. There are six total configurations on which tests were conducted. The author ran two controls using only the host; one test was run on Ubuntu and one was run on Windows XP. The other tests were run on various combinations of hosts and guests: Ubuntu (guest) on Ubuntu, Windows (guest) on Ubuntu, Windows (guest) on Windows, and Ubuntu (guest) on Windows. The author did all of the current testing in the Java programming language because of its interoperability between different operating systems. This allowed for a good comparison between the host control PCs and the virtual set ups.

Each test was run 100 times and the results were averaged to get more accurate measurements. All of the tests were also run on clean installs of the operating systems with only the default settings to get the most unaffected and comparable results.

Performance Testing

The first test was to determine the comparative processing speed of the configurations. To test the processing speed the author created a program that tabulates the time it takes to create 500,000 Java objects (Figure 6).

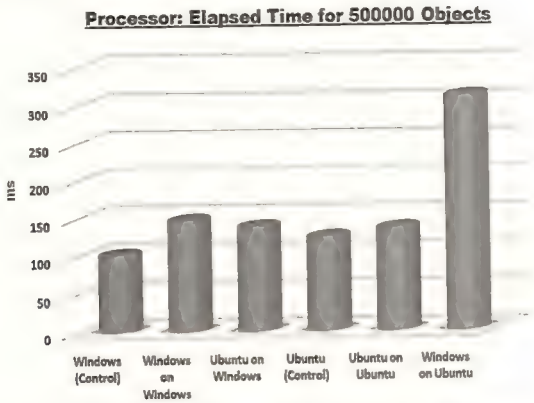

Figure 6. The speed of creating 500,000 Java objects on the various configurations

The results show a minor decrease in performance compared to the controls when the host operating system is the same as the guest operating system. The most surprising thing is the difference between running Ubuntu on Windows and running Windows on Ubuntu. Windows on Ubuntu took more than twice the time in creating the objects compared to the control, while Ubuntu on Windows was actually faster than Windows on Windows. Overall the results show that there are no major differences between the guest and the host, barring Windows on Ubuntu. The author suspects that the large differences here are a result of the way the abstraction layer executes the Windows code when Ubuntu is the host.

The next test was to determine the comparative speed of the NICs on the various configurations. To do this, the author created a program that executes an SQL query through the Java Database Connectivity (JDBC) API (Figure 7). The SQL query result set included 99,900 rows.

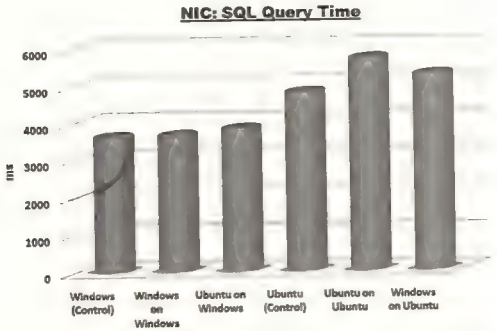

Figure 7. The speed of SQL queries on the various configurations

The results here show a distinct speed difference when using Ubuntu as the host system compared to Windows as the host. The author suspects that the reason is that drivers for things such as NICs are specifically written by the manufacturer for Windows, while the drivers in Linux distributions, such as Ubuntu, are written by the open source community. This may cause a little difference in the implementation of the drivers. There is almost no speed difference between the Windows control and the guests on Windows. On the Ubuntu side there is a little more variation, with the surprise that Ubuntu on Ubuntu is the slowest (although not exceedingly far behind the control). Again the author attributes this to the drivers for Ubuntu being written by the open source community instead of the NIC manufacturer.

The third test program written by the author determines the comparative input and the output speeds of the hard drives on the various configurations. To do this, the program outputs a large text file and then the program reads the file back in and the speeds of each operation are calculated (Figure 8). The key to remember is that the VM's so called hard drive is actually just a file on the host's hard drive.

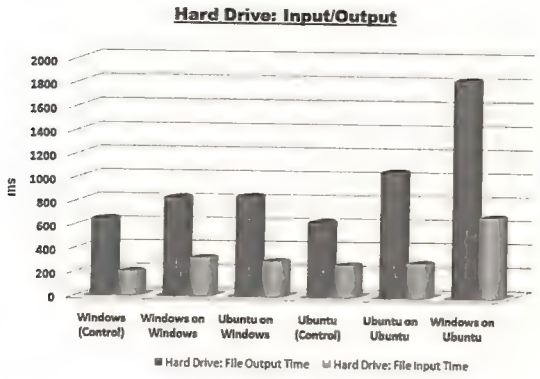

Figure 8. The speed of Hard Drive Input and Output on the Various Configurations

These results show little variation when Windows is the host and much more variation when Ubuntu is the host. With Windows and Ubuntu as the controls, their results are very similar along with the two guest configurations on Windows. The main surprise in this test is Windows on Ubuntu being almost twice as slow on both the input and the output side of things. The author is unsure what factor to attribute that to, although one idea may be code bloat. Code bloat is the fact that Windows continues to run programs developed for DOS, which requires keeping the old code. This may be causing some of the performance issues that have occurred.

The final test the author developed was designed to encompass all of the previous tests to give an overall perspective on performance. The program queries the SQL database and outputs the result set to a file. It then reads the file back in, and creates objects populated with what is in the file (Figure 9)

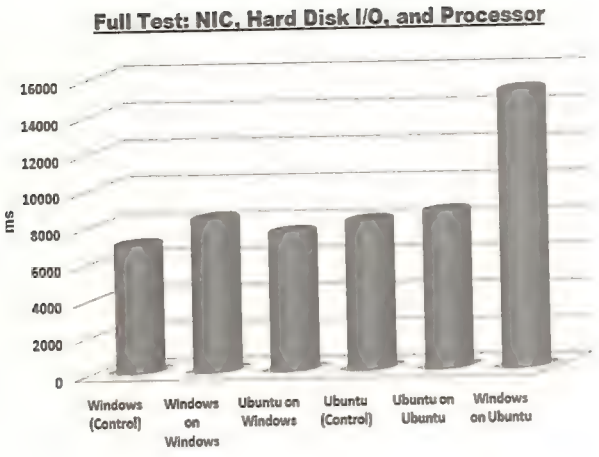

Figure 9. The speed of running the full test, encompassing the NIC speed, hard disk I/O speed, and the processor speed on the various configurations

The tests show that all of the results are very similar across the board, with the exception of Windows on Ubuntu. This tends to go along with all of the previous results. The author was slightly surprised that Windows on Windows did not perform better, but it is still close to the rest and slightly faster than Ubuntu on Ubuntu. This test shows fairly conclusively that, except for the Windows on Ubuntu case, a VM is just as useable as a physical PC.

Conclusion

The main concern about using VMs is the performance cost of using a VM over a physical PC. Through testing, the author is confident that for the most part (and especially when Windows is the host system), virtualization technology can be a great tool for a software developer. The main selling point is the ability to have any operating system at the developer's disposal without the overhead of installing and configuring the OS each time. That is not to say there is no decline in performance, however. There is a slight decline in performance in many cases, but overall the decrease in performance is a very minor one. The only case the author cannot currently recommend is running Windows on Ubuntu, although the author predicts that as both the VMware software and the Ubuntu OS mature, this decline in performance will become smaller. From the point of view of a software developer, the possibilities and applications of virtualization are endless.

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Nutrition, Activity, and Health Status of Elementary Children

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Key Words: Childhood obesity, nutrition, physical activity

Abstract
Obesity is a global concern with an alarming increase in the rate of overweight children. National statistics indicate that 18.8% of children are overweight. (Centers for Disease Control, 2004; 2007b). Limited data exists for elementary school children in Wisconsin, including Menomonie. Forty-two subjects from two elementary schools participated in the study. Height, weight, body mass index (BMI), triceps skinfold and midarm, and waist and hip circumference were measured. Subjects also completed a survey measuring nutrition knowledge, behavior, and intention as well as diversity in physical activity and attitude. Results indicated 16.7% of children in the study were overweight. Trends indicated there was an increase in the prevalence of overweight children with age as well as gender. As nutrition knowledge increased, intentions toward healthy eating behavior also increased. No correlation existed between nutrition knowledge, behavior, or intentions with respect to some components of diversity of physical activity and their attitude to be physically active. Thus effective interventions for this age group should include nutrition education as well as encouraging an active lifestyle.

The Centers for Disease Control (Centers for Disease Control, 2004; 2007b) indicate 18.8% of children ages 6 – 11 years are currently overweight. The projected rise in obesity across this population is of utmost concern; especially because studies indicate over 70% of overweight adolescents become overweight adults (Dietz, 2004; United States Department of Health and Human Services, 2001). The extreme rise in the prevalence of childhood obesity has raised the awareness of the issue and has created opportunity for action to be taken to curb this rapidly growing trend and protect the future of our children. The Institute of Medicine (2005) reported the obesity epidemic has impacted each gender as well as all ages, races, and ethnic groups in the United States.

Limited data for the number of children affected by childhood obesity exists for elementary age children in Wisconsin, especially rural communities. The purpose of this study was to assess the prevalence of childhood obesity in order to provide a framework for a longitudinal study in the Menomonie community. It evaluated the extent of childhood obesity among children 6-11 years of age in Menomonie, Wisconsin.

Methods

Participants

Before data collection began, approval from UW-Stout Institutional Review Board was sought and granted. All public elementary schools in Menomonie, Wisconsin were asked to participate, and two schools volunteered to do so. Grades 1, 3 and 5 were selected to capture various ages in the elementary school population. Additionally, these grades were selected in hope that future studies would be conducted every 2-4 years and capture similar grade intervals for comparison of data. In order to obtain participants,

letters were distributed to parents of children in these grades through school orientation prior to the start of the 2006-2007 school year. Only parent signature on the informed consent was required for participation in the study. However, parents were provided information on the purpose of the study and specific anthropometric measurements. During data collection, parents were not present and any child that expressed concern about participation was not required to continue with participation. Parents were also given the option to have results mailed to them, with a brief explanation of their child's results and contact information for future interpretation.

Anthropometric Measurements

A variety of anthropometric measurements were assessed to provide multiple indicators of a child's health status. Height, weight, calculated BMI, triceps skinfold, midarm circumference, and hip/waist ratio were used to assess the body composition of elementary students. Measurements were collected by trained graduate students and undergraduate assistants from UW-Stout at participating elementary schools in Menomonie, WI.

Height and weight was measured using a portable stadiometer mounted to a calibrated DETECTO physician's scale (model 338) which measured to the nearest millimeter (mm) and kilogram (kg). Height and weight were used to calculate BMI using the metric formula:

$$\text{BMI} = \text{weight (kg)} \div (\text{height (cm)})^2 \times 1000$$

This calculated BMI was then plotted on the BMI-for-age-and-gender chart produced by Centers for Disease Control (2007) to determine the child's risk category: underweight, normal weight, at risk for overweight, and overweight.

Skinfold and circumference measurements were also used to determine child's health status. Midarm, hip and waist circumference was measured with a calibrated Gulick II measuring tape (model 67020), read to the nearest 0.1 cm and then compared to a reference table (McDowell, Fryar, Hirsch, & Ogden, 2005) to determine body composition. No reference tables for hip circumference exist for children. Triceps skinfold thickness test was measured in triplicate using a Lange skinfold caliper (model 68902). The average value was compared to a reference table (McDowell, et. al., 2005) to determine body composition.

Survey Instrument

The Hearts 'N Parks survey, developed by the National Heart, Lung, and Blood Institute in conjunction with the National Recreation and Park Association (2004), was adapted from the validated CATCH survey and utilized in this study. One feature of the child survey was that it included pictures with the answers making it easier to administer the survey to younger grades (6-11 year olds). Knowledge, attitudes, and behaviors pertaining to nutrition and physical activity can be assessed with this tool by utilizing the answer key provided with the survey. A score was calculated giving one point for each correct answer from which a percent correct value was calculated. The survey was broken down into categories relating to nutrition knowledge, behavior, and attitude, physical activity attitude, and questions regarding diversity of physical activity. These categories were analyzed to determine where interventions should be focused.

Data Analysis

Descriptive analyses (mean, median, standard deviation, standard error, minimum and maximum ranges) were run to profile anthropometric measurements. Cross-tabulation of frequency counts and percentages between BMI categories and school, gender, and grade were conducted.

Pearson correlation coefficient for age, height, weight, BMI category, triceps, waist, hip and mid arm circumference were analyzed against the variables for nutrition knowledge, nutrition behavior, nutrition intentions, physical activity and activity intentions. Independent t-tests were run to compare nutrition information (knowledge, behavior and intentions) to physical activity within a subject. Levene's test for equal variances was used to check for homogeneity of variances. Independent t-tests were used to determine if there were significant differences between gender and school. Analysis of Variarance (ANOVA) with Duncan's and Newman-Keuls range tests looked at the possible correlation between nutrition knowledge, behavior, intentions as well as activity using grade level as the independent variable.

Results

Only two of six elementary schools in the School District of the Menomonie Area participated in this study. From these, a total of 42 students in grades 1, 3 and 5 took part in this study. The following trends, as shown in Table 1, were observed: 1) the risk for children falling into the overweight category tended to increase with grade level and 2) there were noticeably more boys versus girls (as percentage of total) in the healthy weight category compared to other categories. Overall, BMI indicated 16.7% of elementary age children in Menomonie were overweight and 26.2% were at risk for overweight. Other anthropometric measurements, including mid arm circumference, triceps skin fold, and hip and waist circumference, did not show findings different from those determined using BMI (data not shown).

Table 1

Percentage of Participants' BMI by Grade, Gender and School

	Overall	Grade			Gender		School	
	%	1st	3rd	5th	Boys	Girls	School X	School Y
Underweight	2.4 (1)	--	--	--	--	--	--	--
Healthy weight	54.7 (23)	61.1 (11)	57.9 (11)	20.0 (1)	70.6 (12)	44.0 (11)	53.3 (8)	55.6 (15)
At risk	26.2 (11)	33.3 (6)	15.8 (3)	40.0 (2)	23.5 (4)	28.0 (7)	26.7 (4)	25.9 (7)
Overweight	16.7 (7)	5.6 (1)	21.1 (4)	40.0 (2)	5.9 (1)	24.0 (6)	20.0 (3)	14.8 (4)

Note: Values are reported as frequency of the mean, n in parenthesis. -- Dashes indicate data regarding grade, gender, and school are not provided to protect the participant's identity.

The child survey addressed nutrition knowledge, behavior, and intentions as well as attributes regarding physical activity. Overall, nutrition knowledge was significantly higher than the child's behavior and intentions to eat healthy as shown in Figure 1.

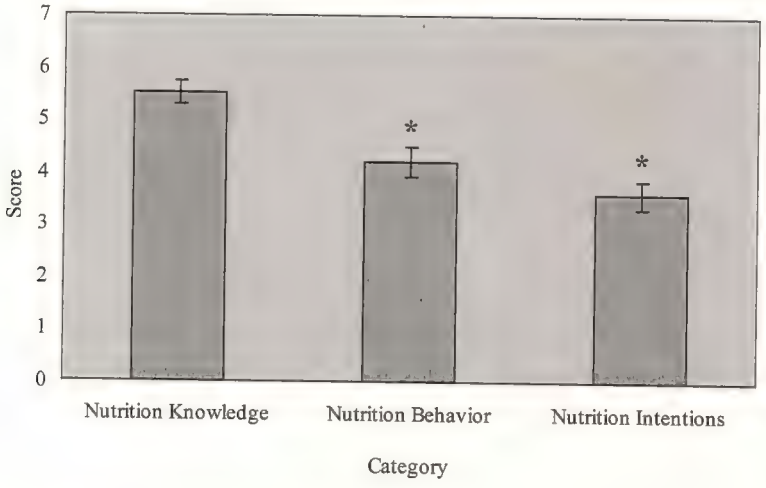

Figure 1. Mean child nutrition survey scores.
* $p<0.05$, MANOVA indicated significance in nutrition behavior and intentions categories with respect to nutrition knowledge. Values are shown with standard error.

As nutrition knowledge increased, healthy eating behaviors and intentions for eating healthy also tended to increase (data not shown). There was a consistent pattern of overweight children scoring higher than their healthy and at risk for overweight peers in the nutrition subcategories as shown in Figure 2. Intentions to eat healthier among overweight children were greater than their peers. This is an important finding as it may suggest the social pressures felt by these children.

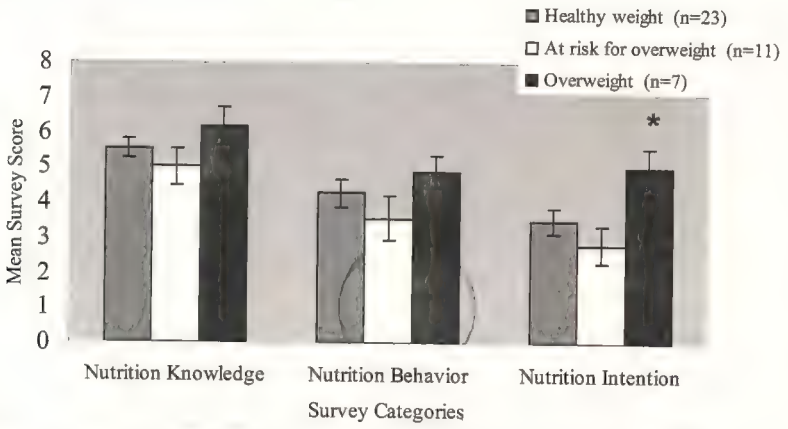

Figure 2. Average nutrition survey scores based on health status.
*$p<0.05$, one way ANOVA between health status and within survey category is shown with standard error. Underweight category not analyzed due to n=1.

Nutrition scores were significantly different with respect to grade. This was expected with the increase in cognitive development in higher elementary school grade levels. More appropriately, the analysis of the survey was conducted in regards to gender and school. Independent t-tests indicated no difference between nutrition subcategories for grade and school (data not shown).

Survey results also indicated that the number of different activities children like to do was significantly greater than the number of activities children actually did (Figure 3). Children reported that they like to do 8.48 (mean) +/- 3.44 (standard deviation) different activities every week, but actually only did 3.4 (mean) +/- 3.29 (standard deviation) different activities in the last week. Different activities children like to do were also significantly greater than what children want to learn how to do (mean score 4.24 with standard deviation +/- 3.52, Figure 3), implying that skill development and knowing game rules are less important for this age group.

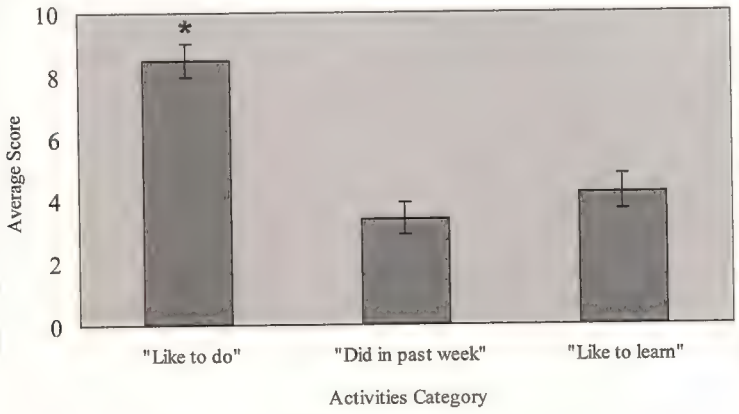

Figure 3. Mean child physical activity scores.
*$p<0.05$, MANOVA indicated significance between "like to do" and categories "did in past week" and "like to learn". Values are shown with standard error.

Discussion

Overall, BMI indicated 16.7% of elementary age children in Menomonie were overweight and 26.2% were at risk for overweight. This is consistent with national values which indicate 18.8% of children (ages 6 – 11 years) are currently overweight (Centers for Disease Control, 2004; 2007b) and a single state report stating that 16-18% of children in Wisconsin are overweight while 28-37% are at risk for overweight (Hughes, Murdock, Olson, Juza, Jenkins, Wegner, & Hendricks, 2006). Wisconsin lacks additional information regarding the status of this age group as reported estimates are based on the Youth Health Behavior Risk survey for grades 9-12 (Centers for Disease Control, 2006). Wang (2006) predicts the rate of overweight children could increase to as much as 46% by the end of the decade, contradicting achieving the Healthy People 2010's goal of reducing childhood obesity to 5% by 2010 (United States Department of Health and Human Services, 2000). Baseline data collected for Menomonie, WI, gives a snapshot of the population and the opportunities to conduct further measurements to

determine change. This data will be valuable in determining the effectiveness of future interventions.

No correlation existed between the categories of nutrition or physical activity with health status. While these factors were not affected directly, promoting both nutrition education and physical activity are still key components for lifestyle change. Any intervention should also be multi-faceted (school, family, community). School-based interventions are necessary because this is where children spend the majority of their day. Family- and community-based interventions allow involvement of the family targeting healthy lifestyles to continue at home. Other efforts could target gender, as girls are at greater risk at being overweight (National, Heart, Lung and Blood Institute, 2007). Recommendations for local public health departments and school districts would be to seek grant funding and coordinate with coalitions in their town to implement interventions.

Triceps skinfold and midarm, hip, and waist circumference did not provide information different from that provided by BMI, gender, and age. Thus, the more invasive measures may not be warranted in future studies. This may have been a contributing factor to low participation as parents may have been alarmed at the use of these procedures on their children. Higher participation would allow for comparison between grades at each school, gender within each grade and with state and national data.

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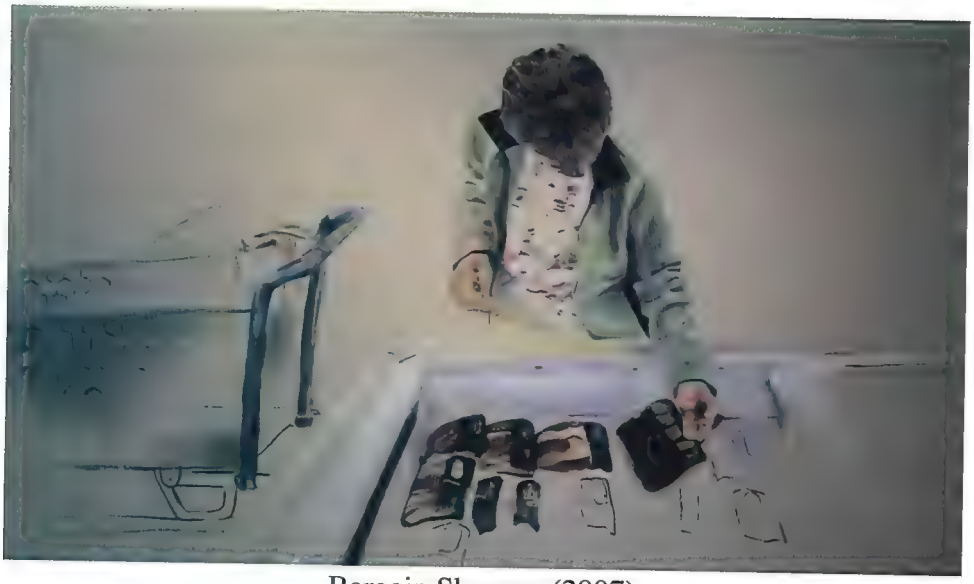
Bargain Shopper, Pete, Rachele, and Bingo Nation

Miriam Houg
Undergraduate Student, Bachelor of Fine Arts

My art grows out of a voice of the northern Midwest community. I have been a middle class citizen of the suburbs of St. Paul, Minnesota all my life. In being part of a defined social class I have always searched for the identity that we shared. Through this search I have found that an individual identity in a global society is more of an experience than an appearance. At times, communities like the church are undervalued by contemporary culture for their conformity. However, having social underpinnings of a community have relevance psychologically, morally, and socially that has helped to shape my life and art.

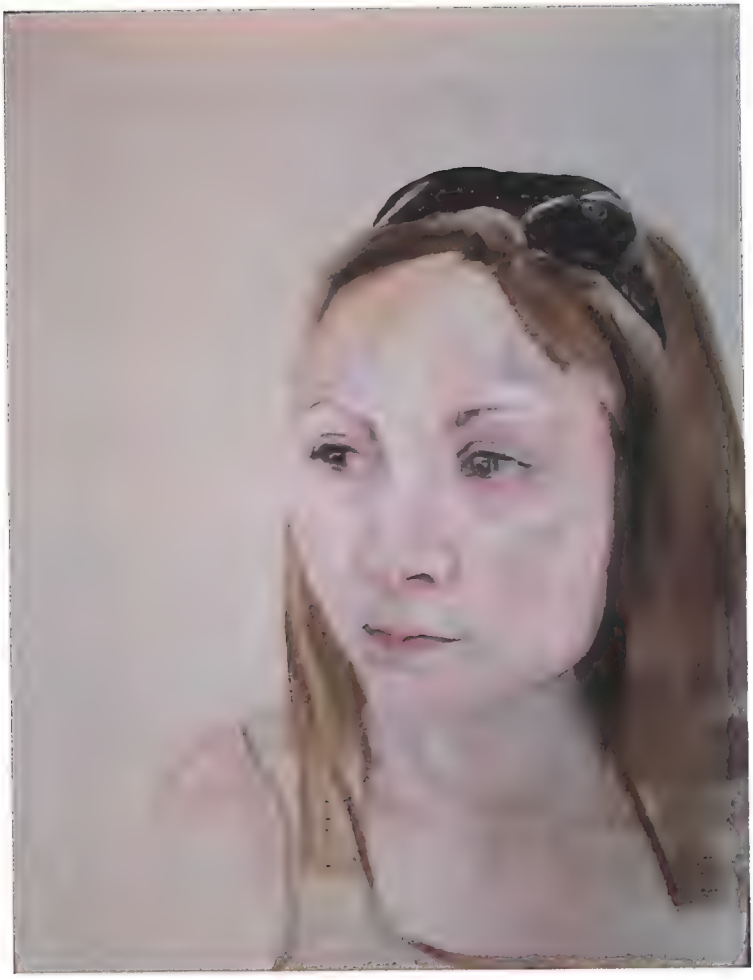
For my art I research the gathering places and leisure activities of middle class Midwesterners. Like an anthropologist I want to know first hand how my subjects interact in specific spaces and amongst themselves. I pursue and value the encounters I might have with a truck driver at a truck stop, bingo players at the Moose Lodge on Thursday nights, or even shoppers at Wal-Mart. By having these experiences and documenting them through paint I am able to use a vocabulary that is able to communicate in the same tradition as history painting like that of Jacques-Louis David or contemporary painter Eric Fischl. I see my art as a means of communicating to future generations what constituted daily life for middle class Americans in the upper Midwest.

For example, in my painting "Bargain Shopper," the sensibilities of the elder generations are employed. Shopping at the local Wal-Mart to save money, but lacking their own voice in the corporate takeover of their local community. The passive action of shopping and grazing among mixed goods for the best deal is a habit patterned by necessity. Passivity, irony, and ritual are all important elements in identifying the sensibilities of a Midwesterner. With "Bingo Nation" I worked to isolate the woman and the viewer in a confined space. Having experienced playing bingo across from the woman, I was able to notice that she was one of the elderly women during intermission that served cake and juice to the players. This volunteerism allowed her to play a necessary role in her chosen community. The roles humans take on in congregation with one another identify them with their sensibilities and roles in life. By bridging the gap of high culture and low culture, the middle class is able to decipher the struggle for true identity in contemporary society.



Bargain Shopper (2007)
Oil on canvas
5'x3'

Pete (2006)
Oil on Canvas
5'x4'



Rachele (2007)
Oil on Canvas
2'x 2.5'

Bingo Nation (2007)
Oil on canvas
2'x3'

Abide, Proceed, Migration Series, and The Masses

Katie Unertl
Undergraduate Student, Bachelor of Fine Arts

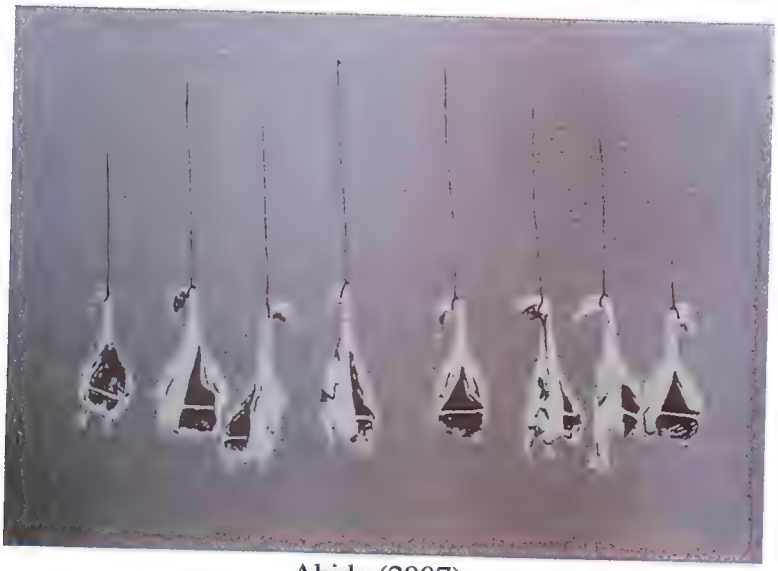
"One means of sanity is to retain a hold on the natural world, to remain, insofar as we can, good animals."
–Wallace Stegner

In Taoist philosophy, humanity and nature are one union. Through my art practice, I am continuously investigating this union. I try to demonstrate how important it is to keep these two terms integrated by asking what it means to be a human animal. Are we, as humans, dissimilar to all the other species that have lived on earth?

To understand who we are as a human animal, it is important to examine how we participate in daily life as a form of survival. Part of my art includes examining different means of survival through repetition and how survival differentiates between species. I attempt to display the importance of viewing a natural environment in the same context as a human-made environment; to negotiate the differences and similarities between the two worlds. I use various types of metal to symbolize our constructed environment, and screen-printed animals portray the living or dead inside that environment. All of these marks and materials suggest the effect of humans on nature. Printing is important to my work in order to further emphasize the idea of repetition and fecundity as a survival tool in nature.

The context of where we place ourselves as humans in relation to nature is crucial to how we view the world. Our construct of place will ultimately determine who we are. As an artist, I believe it is important to maintain a level of understanding of what it means to be human and how I relate to nature. Through my art, I will continue to explore my own relationship as well as humanity's relationship with the world around us and what it means to be a human animal.

Through my art I will continue to explore what it means to be a human animal as well as humanity's relationship with the natural world.



Abide (2007)
Ink on steel
5x7

Proceed (2007)
Mixed media on steel
8x8

Migration Series (2007)
Ink and paint on steel
12x26

The Masses (2007)
Ink and paint on steel
24x24

Big Boned and Fey, Feel the Mattress Tense Beneth Me, Meet Your Neighbor, Common, and Sense the Accrues with Experience

Andrea Avery
Undergraduate Student, Bachelor of Fine Arts

My original inspiration comes from the small Midwestern town I grew up in, the women in my family, and the way needlework was a tie that bound them throughout generations.

I come from a long line of artists and craftsmen. This upbringing has left me to become interested in a number of art mediums. A combination of painting and fiber-art techniques make up the core of my current body of work. In the instances where my imagery may concern only a single idea, the medium which it is created also holds significance--there is a symbolism in the media itself.

From a young age I was taught that needlework, quilting, and rosemaling were acceptable forms of artistic expression because they were utilitarian. As I went on to paint on my own, I decided to break free from the conformity of the former generation, but the appreciation remained. Needlework and stitching became symbolic to me, representing a feminine narrative and a link to previous generations that lead to the creation of my work. I try and use the stitch as an intentional artist's mark – not as a utilitarian element, but rather a visual means of expression.

Using paper dolls and their clothing, I portray traditional socially acceptable figures that young children play with in order to understand and role play "real life", but in a much idealized manner. Often the clothes have arms and legs but no faces, or their faces are covered by masks. This leaves ambiguity, letting viewers project themselves or someone of their choice on to the figures. Through the combination of these nostalgic artifacts I have tried to construct narratives speaking of the complexity of the human relationships, birth, procreation, and death of the members of my small town. Each of these works is meant to be a narrative of a period in an individual's life and my emotional response to it.

In the current series of work that I have been painting, I incorporate multiple types of media to communicate within each painting. In each piece I try not to limit myself in my use of materials but rather try to explore them. The work is constructed in multiple layers creating depth and an intimacy with the viewer. Although each story is based on actual events, the use of recognizable imagery and everyday objects leaves the viewer to interpret the 'meaning' of the piece in their own way. In my most recent pieces I explore the idea of gender association within the character of the animal. Most of my work juxtaposes idealized beauty with a seemingly non-aggressive symbol, but because of the placement and interaction of the images a conflict is illustrated and a tension is created.

"Big Boned and Fey" (2005)
Found Objects, Embroidery, Ink Transfer on Linen
30"x 30"

"Feel the Mattress Tense Beneath Me" (2005)
Found Objects, Ink Transfer on Linen
9"x 9"

"Meet Your Neighbor" (2005)
Found Objects, Embroidery on Linen
12"x 14"

"Common Sense that Accrues with Experience" (2005)
Found Objects, Embroidery Floss on Panel
28"x 28"

Weight, Born Furless and Blind, Something to Remember, and Climax No. 49

Christina Williams
Undergraduate Student, Bachelor of Fine Arts

Utensils, toys, nick-knacks, and even lawn ornaments are some of the overlooked items I collect that find their way into my art. As I work with these common objects, they form relationships with me, as well as with each other. In turn, I begin to discover meanings and symbols that I see locked deep within these possessions. Many of these forms awaken distant memories, events, and images of people in my life. These memories are also influenced by existential narratives in books such as Dostoevsky's The Brothers Karamazov and Camus' Exile and the Kingdom. I find their worlds' dark and difficult to live in, yet there is an undeniable and perhaps even cruel honesty that I admire. It is easy to retell stories happy in nature; still the ones we keep veiled for fear of what they might say about us are the ones that attract me most. With these stories in mind, I invite that same honesty into my work that it might otherwise not possess. In turn I can begin a visual reinterpretation process by juxtaposing one object with another, creating scenarios, and by placing them within an intended background. Inevitably I spend much of my time looking at and arranging small scenes, and considering how relationships can be formed, as well as shape meaning.

The process of finding these items is very intuitive. I will often see something and be drawn to it immediately. It is then that I bring it into my studio and let it lay dormant until an alliance of sorts builds between the object and myself. Often when I begin to paint I start by considering the painting's composition and the placement of the subject(s) within the picture plane. I carefully consider scale, color, spatial relationships, and the fabric it is painted on. The narratives are sometimes formed during this process and a painting might resolve quickly. At other times objects force me to contemplate them for long periods of time before I can fully understand what they mean to me or how I should incorporate them. This time affords me the opportunity to understand a painting more fully before any further decisions are made. This meditative process parallels my process of using oil paints. I find great pleasure in trying to manipulate and control the paint. I also enjoy the clarity and vibrancy that can be achieved with oils as well as the subtleties that one can achieve with patience.

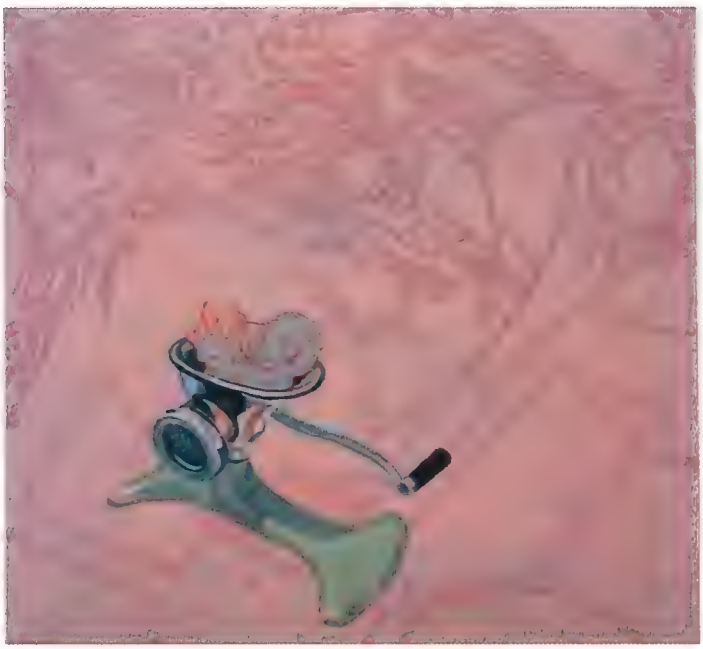
My choice of painting surface is as important to the piece as the objects that are painted on it. All of these elements are fundamental to finding the meanings of each work. I use a traditional sizing medium that is transparent allowing me to not only use raw linen as a

surface to paint on, but also fabrics that have been dyed or have ready-made designs. Because of this there are many exciting possibilities when choosing the background for a piece. For example, in the painting "*Born Furless and Blind*" I used thin semi-transparent dyed pink linen stretched over a cotton fabric with a printed grid design. My intent was to allow the painted baby mice to mimic the transparency of the linen and introduce the idea of their fragility against the harder cage-like property of the underlying machine printed cotton.

Through patience I believe I invite into my work both intuition and realized concepts. Despite the disparate array of objects in my paintings, taken as a whole I think my art begins to speak about a larger idea of what it is that has made me who I am. The production of my art allows me time to reflect on my history and reanalyze my previous perceptions and confront them. Although the symbols that I use are personal metaphors, it is also my intention that they can embody a more universal "self". The resulting paintings are intended to allow viewers to find their own personal connections and meanings within them. It is my hope that my art will be both mysterious and provocative while evoking open-ended narratives.

"Weight"
oil on linen
11 1/2" x 11 1/2"

"Born Furless and Blind"
oil on linen, printed cotton
11 1/2" x 11 1/2"



"Something to Remember"
oil on linen, polyester
8"x8"

"Climax No. 49"
oil on printed canvas
6 3/4"x 10"

Discipline and Intergenerational Transmission

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Key Words: discipline practices, intergenerational transmission, corporal punishment

Abstract
The disciplinary practices that parents use on their own children affect the child throughout his or her life and influence the discipline that they plan to use with their children. This study investigated attitudes about intergenerational transmission of corporal punishment and nonphysical means of discipline by surveying 100 male and female college students ages 18-26 years of age at a Midwestern college. It was hypothesized that college students would plan to discipline their own children the same way they were disciplined as children based on the Social Learning Theory. Survey data was analyzed using frequencies, cross-tabulations, and a reliability analysis. Results indicated the majority of participants will use similar discipline practices as their parents. These results confirmed the hypothesis and were supported by the literature. Implications for practitioners include there needs to be parenting classes that address effective discipline practices. Suggestions for replication and future research are discussed.

The way a child is disciplined has many effects on the child's physical, behavioral, and mental well-being (Bates, Deater-Deckard, Dodge, & Pettit, 2003). There is much research-based evidence of the intergenerational transmission of punishment when used as a discipline practice. Children of parents who used corporal punishment as a discipline technique tend to use corporal punishment as a discipline technique with their own children (2003). There are negative and positive perspectives on the different discipline practices from professionals and from the children receiving the discipline. For the purpose of this study, discipline is defined by Evans, Savage, and Socolar as creating an environment based on parent-child relationships that encourages positive outcomes while decreasing negative behaviors (2007). The authors reviewed the literature on different discipline practices that addressed the reasons parents use certain discipline practices and the effects of those practices on children. The authors then surveyed the perspectives of college students regarding this issue.

While gathering information for the research question- "What is the relationship between the ways college students were disciplined and how it affects the way they are planning on disciplining their own children"- the authors found it important to understand what other studies have found regarding discipline. The authors found many articles on gender-related parenting differences, however there were few on intergenerational discipline patterns. In much of the literature about discipline, there was information about corporal punishment and the effects it has on children and their development. The literature discusses how children feel about discipline practices and how harsh the punishments are that they receive. The literature in this article discusses the different types of discipline and how frequently the different types were used. Most of the surveys,

statistics, and information in this literature review helped the authors in determining variables and survey questions to ask the research sample, and the research also relates to the question about what parents or future parents determine to be effective parenting. (Coffelt, et al. 2007; Evans, Savage, & Socolar, 2007; Bates, Deater-Deckard, Dodge, Lansford, & Pettit, 2003; Desbois & Konstanstareas, 2001)

Coffelt et al.(2007) talks about harsh verbal and physical discipline and the children's behaviors. This article helped with our study because it looks to see if harsh verbal and physical discipline is associated with child internal and external problems. The study found harsh discipline of each parent is significant in the context of the other parent's harsh discipline. Also that positive parenting buffers a child from the results of harsh discipline by the same or the other parent.

Evans, Savage, and Socolar (2007) discuss a study of different types of discipline with young children ages 1-3 and the changes in punishment methods that occurs between those ages. The different kinds of discipline used included, monitoring, verbal communication, modeling, ignoring, and corporal punishment, and the modes of administration included positive demeanor, negative demeanor, consistency, and follow-through. This article relates to our research question in taking a look at how discipline practices change and what discipline techniques parents use and how often.

Bates, Deater-Deckard, Dodge, Lansford, and Pettit (2003) studied adolescents' attitudes about physical punishment and found that overall adolescents view physical means of punishment as negative. In families where the parents were spanked heightened the likelihood they will use spanking as a method of discipline. The article also found that children from families that use corporal punishment as means of discipline were more likely to use and endorse physical punishment.

Desbois and Konstanstareas (2001) studied about how younger children view their behavior and the harshness of the punishments they receive. The study found that children as young as four years old could make rather reliable judgments of parental disciplinary techniques.

After reviewing the literature, researchers have found many ways that parents discipline their children and that each method has different effect. What the authors did not find, however, was research that investigates whether intergenerational parenting is a reason parents discipline the way they do. Further research is needed in this area. The gap that the authors hope to fill is whether or not the method by which one was disciplined as a child will influence how one decides to discipline one's own children.

The theory the authors are using is Bandura's Social Learning Theory (Muuss, 1996). This theory states that individuals learn, develop, and behave because of parent to child modeling, imitation, observational learning, media, and peers. An individual's behavior or temperament is the direct outcome of the parent's modeling and social and cultural influences on the individual. As applied to this study, this theory would predict intergenerational transmission of punishment methods – that college students will discipline their children in the same way they were disciplined by their parent or guardian.

The purpose of this study was to examine the views of college students on their parents' disciplining practices and what effects these practices may have on the participants own disciplining or future disciplining practices. The sample was comprised of college students from a small, Midwestern university. It is the authors' hope that the results from this study will be used by parents, future parents, family therapists, family educators, day care providers, medical personnel, or any other profession working with

parents and families to encourage healthy discipline practices. The central research question in this study is "What is the relationship between the ways college students were disciplined as children and how it may affect the way they are planning on disciplining their own children?" Based on the Social Learning Theory, that authors predict that parents or future parents will discipline similarly to the ways they were disciplined when they were younger. Again, this is based on the idea that individuals mimic behavior that was modeled to them when they were younger – including discipline practices.

Method

Participants

The site of this study was at a Midwestern university. The participants included 52 female participants and 48 male participants (N=100). Six female participants were between the ages of 18-20, 33 were between ages 21-23, and eight were between the ages of 24-26. Four male participants were between the ages of 18-20, 38 were between ages 21-23, and six were between the ages of 24-26. There were 18 females and 12 males that chose corporal punishment as their parents' discipline practice; 34 females and 36 males chose nonphysical punishment as their parents' discipline practice.

Research Design

The purpose of this survey research was to be able to generalize to a similar, larger population so that some inferences could be made about characteristics, attitudes, or behaviors of this population (Babbie, 1990). This study utilized a cross-sectional study design in that it was used to capture knowledge, or attitudes, from a cross section of the population at one point in time. The form of data collection was self-administered questionnaires. The rationale for using this method was that it was the most efficient method to gather the data directly on campus due to the rapid pace of our research course, convenience, low cost, and the quick return of data. The authors employed purposive, non-random sampling and aimed to sample approximately equal numbers or males and females. The authors are using nonrandom in order to be inclusive when in the classroom. The ethical protection of human subjects was provided by completing the Human Subjects Institutional Review Board (IRB) training; this study has been approved by the IRB.

Data Collection Instrument

In order to address the attitudes of college students about generational transmission of discipline practices, the authors designed a survey. The survey included a cover letter that contained implied information comprised of a description of the study, definitions of any terms not commonly known, potential risks and benefits, estimated time commitment, method of protecting confidentiality, policy on voluntary participation, contact information for the research team and the supervisor, and instructions for completing the survey.

The survey consisted of two demographic questions relating to age and gender, as well as a category for discipline practice administered by parents/guardians to establish groups by which the authors could analyze data. Participants were then given eight close-ended statements based on a 5-point Likert scale which measured the intensity of the respondents' attitudes ranging from one (strongly disagree) to five (strongly agree). Questions were informed by literature and theory regarding what factors relate to college students' attitudes towards discipline practices.

The authors feel that sufficient face validity has been demonstrated because each of the survey questions was connected to the subject of discipline practices and intergenerational transmission. The authors feel that the statements covered a broad range of issues surrounding discipline practices and their effectiveness and thus demonstrated adequate content validity. To increase the understandability of the survey, the authors piloted the survey to five undergraduate students. Their feedback indicated the survey was clear, concise, and ready for distribution.

Procedure

Purposive sampling led the authors to collect data from classes that were specifically either predominantly female or predominantly male. We used nonrandom selection in order to be inclusive when in the classroom and to gather as much data as possible. Upon entering the classroom, one author read the implied consent form to the students while the other passed out the survey to the students participating. The authors informed the participants that participation in this study was completely voluntary, and if they wished to withdraw participation they could do at any time. The researchers instructed that completed surveys be placed in an envelope at the front of the classroom. The authors and professor for the course left the room during the survey time period to avoid placing pressure upon the students to participate, make the participants uncomfortable, or risk introducing social desirability bias. Completed surveys were stored in a secure location until data analysis.

Data Analysis Plan

The data was first cleaned and then coded checked for missing data using acronyms for each variable. The first two questions on the survey were demographic variables: age and gender. The only independent variable was discipline practice *(DIS)*. Each survey statement was a dependent variable and given an acronym name: To know if the participant is planning on disciplining the same as their parents/guardians *(DSP)*, if the participant viewed parents/guardians discipline as effective *(EDP)*, if the trust bond was impacted due to discipline practice *(PTR)*, if the participants respect for their parent was effected from discipline practice used *(PRE)*, if the participant feared parents/guardian from discipline practice *(PFE)*, if participant plans on using physical discipline *(PDS)*, if participant plans on using nonphysical discipline *(NPD)*, and if participant plans on using outside resources *(ORS)*. The level of analysis in this study was the individual. Because the authors are comparing groups based on discipline practice, the data analysis included frequencies, cross-tabulations, and mean comparisons. The authors also conducted a reliability analysis.

Results

Authors conducted a reliability analysis to determine if this measure was a reliable index of the major concept – college students' attitudes on the relationship between the ways they were disciplined and how it may affect the way they are planning on disciplining their own children. A reliability analysis yielded a Chronbach's Alpha value of .298. This value indicates that the survey items were not a reliable measure of the major concept, however if the variable *PFE* were to be removed from the survey, the reliability of the measure would increase to .51. The authors received qualitative comments at the end of a number of our surveys as well, and these comments were analyzed and themes will be discussed later in this paper.

Table 1

Percentage Comparison Between Corporal Punishment and Non Physical Punishment Groups

Parental Punishment Style	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
I am planning on disciplining my children the same way my parents disciplined me.					
Corporal	13.3%	13.3%	23.3%	33.3%	16.7%
Non Physical	1.4%	4.3%	11.4%	40.0%	42.9%
The way my parents disciplined me was effective.					
Corporal	0.0%	16.7%	3.3%	50.0%	30.0%
Non Physical	1.4%	4.3%	1.4%	38.6%	54.3%
The trust bond between me and my parents was not impacted by the type of discipline they used with me.					
Corporal	3.3%	10.0%	20.0%	50.0%	26.7%
Non Physical	10.0%	8.6%	18.6%	24.3%	38.6%
I respected the way my parents as a result of the type of discipline they used.					
Corporal	10.0%	13.3%	20.0%	43.3%	13.3%
Non Physical	1.4%	1.4%	8.6%	40.0%	48.6%
I feared my parents as a result of the type of discipline they used.					
Corporal	23.3%	26.7%	13.3%	26.7%	10.0%
Non Physical	55.7%	15.7%	20.0%	4.3%	4.3%
I am planning on using physical discipline with my children.					
Corporal	13.3%	10.0%	40.0%	23.3%	13.3%
Non Physical	35.7%	31.4%	24.3%	4.3%	4.3%
I am planning on using nonphysical means of disciplining with my children.					
Corporal	3.3%	3.3%	20.0%	43.3%	30.0%
Non Physical	2.9%	1.4%	4.3%	35.7%	55.7%
I am planning on using outside resources to help discipline my child (i.e. parenting programs, Family Counselor, Family Resource Center, books).					
Corporal	10.0%	20.0%	40.0%	20.0%	10.0%
Non Physical	11.4%	22.9%	28.6%	25.7%	11.4%

a Corporal n =30, Non physical n = 70.

Table 2

Mean Comparison by Discipline Type

DIS	DSP	EDP	PTR	PRE	PFE	PDS	NPD	ORS
Corporal:								
Mean:	3.26	3.93	3.76	3.36	2.73	3.13	3.93	3.00
SD:	1.28	1.01	1.07	1.18	1.36	1.19	0.98	1.11
Non Physical								
Mean:	4.18	4.40	3.72	4.32	1.85	2.10	4.40	3.02
SD:	0.90	0.84	1.32	.81	1.14	1.07	0.87	1.19

Note. Likert Scale 1= Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, 5 = Strongly Agree. (DIS)=Discipline practice parent/s used; (DSP) = I am planning on disciplining the way my parent/s disciplined me; (EDP)=The way my parent/s disciplined me was effective; (PTR)=The trust bond between me and my parent/s was not impacted by the type of discipline they used with me; (PRE)=I respected my parent/s as a result of the type of discipline they used; (PFE)=I feared my parent/s as a result of the type of discipline they used; (PDS)=I am planning on using physical discipline with my children; (NPD)=I am planning on using non-physical means of disciplining my children; (ORS)=I am planning on using outside resources to help discipline my child (i.e. parenting programs, Family Counselor, Family Resource Center, Books.

Discussion

Overall, the results of this study supported the hypothesis that college students would use the same discipline practices with their children as their parents used with them. This finding is supported by the Social Learning Theory that posited that children will develop and behave most like their parent(s) because children tend to model and imitate the people with the most influence in their lives (Muuss, 1996). The authors will first discuss each dependent variable in terms of how the results either agreed or disagreed with the literature and/or theoretical framework. Authors will then address limitations to the study, implications for future research, and concluding remarks.

In agreement with the hypothesis and the Social Learning theory, the majority of participants supported disciplining their children similar to their parents (Muuss, 1996). A majority of our respondents also agreed that their parents' disciplining practices were effective, again supporting social learning principles. Participants responded that they maintained a trust bond between themselves and their parents through the use of discipline. This finding supports the authors' hypothesis but is in contradiction to the literature, which suggests that corporal punishment is viewed negatively by children. Additional literature supports generational transmission of corporal punishment; children whose parents used corporal punishment as a means of discipline will more likely use or support corporal punishment (Bates, Deater-Deckard, Dodge, Lansford, & Pettit, 2003). Participants also feel they have a trust bond between themselves and their parents.

Much like other variables, the responses from participants were supportive of having respect for their parent(s) type of discipline practice used. This supports the hypothesis that participants respected their parents from the type of discipline they used; thus, participants will discipline like their parents and gain their children's respect according to the Social Learning Theory (Muuss, 1996). The majority of participants disagreed that they feared their parent(s) as a result of the type of discipline practices used, thus the participants will discipline the same way to not have their children fear them because of the type of discipline the participants plan on using.

Interestingly, the majority of recipients who indicated they were subjected to corporal punishment indicated that they agreed or strongly agreed that they feared their parents. This is interesting because results also show that the majority of participants who were the recipients of corporal punishment indicated that they were going to discipline like their parents. When asked about using corporal punishment as a discipline practice, a majority of participants who indicated they were recipients of corporal punishment indicated they were undecided about using physical discipline with their children; the research reported that using physical discipline with children causes external and internal negative effects (Desbois & Konstanstareas, 2001). This result is surprising because the majority of participants stated they were going to discipline the way their parents disciplined them, using physical discipline.

Participants who did not receive corporal punishment as children indicated that they did not plan to use corporal punishment on their children, which supported the hypothesis that participants would not use physical means to discipline their children. Because this group never witnessed corporal punishment, these results also support the Social Learning Theory of intergenerational discipline practices. Surprisingly, participants who indicated that they had been subjected to corporal punishment reported that they planned to use nonphysical discipline practices. This does not support the hypothesis because most participants agreed or strongly agreed with using nonphysical means of discipline – unlike the way they were disciplined as children. The majority of participants subjected to nonphysical punishment indicated that they planned to use the same discipline strategy that was used on them, support the authors' hypothesis. Finally, participants who were subjected to corporal punishment indicated they were undecided about incorporating outside resources in disciplining their children while participants who received non-physical punishment agreed that they would seek outside resources in disciplining their children. Because of this disagreement between groups, the authors reserve judgment regarding the final hypothesis and encourage additional research.

Regarding the survey statement that participants are going to discipline their children the way their parents disciplined them, 50% of the corporal punishment category and over 50% of the nonphysical category agreed. This supports the Social Learning theory (Muuss, 1996) that hypothesizes that children are going to use the same discipline practices as their parents. Over half the participants in both corporal punishment and non-physical punishment groups indicated that they feel their parents discipline practices were effective. This is under the umbrella of The Social Learning theory that children learn from their parents, do as their parents do, and also feel those practices are effective for them to use from generation to generation.

Analysis of qualitative data yielded several themes. Most of the comments were explaining the reason why participants answered the way that they did. Some appeared to be defending their parents and their choice of discipline practices, some were explaining their view as to why they were disciplined the way they were, and some were explaining that there was more than one discipline practice used. In relation to the authors' hypothesis, participants may be defending their parents because according to these results, the majority of our participants stated that they will use the same discipline practices and might feel they are defending themselves at the same time.

Limitations

One limitation to this survey was a small, non-diverse sample that inhibits external validity. Another limitation is the authors' decision to forego random selection because of time constraints and the number of available participants. A final limitation to this study was the inability to use this sample in longitudinal research.

Implications for Practitioners

The findings of this study indicate that the majority of students surveyed agreed that they plan to discipline their children as their parents disciplined them, supporting the idea of intergenerational transmission of discipline. Therefore, parents, family resource practitioners, family therapists, day-care providers, counselors, or teachers of parenting classes could utilize this information to increase awareness of the power of social learning and to influence healthy discipline practices by providing resources encouraging a variety of effective discipline techniques.

Implications for Future Research

The researchers recommend that future investigations utilize a larger, random, and more diverse sample to increase external validity. The authors also recommend researching which discipline practice(s) are the most effective and why. This research is providing explanations as to why people discipline the way they do, but there is a need for research regarding which discipline practice(s) are the best or most effective for their children and what criteria is being used to make these decisions apart from the intergenerational factor. If this study were to be replicated, the authors suggest either rewording or discarding the statement *(PFE)* that asked if participants feared their parents as a result of the type of discipline they used. According to a reliability analysis, Chronbach's Alpha would increase from .298 to .505 if the statement *(PFE)* were taken out of the survey. The authors speculate that this statement may be and issue because participants did not want to admit their fear of a parent(s), or felt they needed to mark the socially appropriate response.

Conclusion

As a result of this study, the authors hope that current and future parents will take a step back and look at their discipline practices, why they are disciplining the way they are, and the possibility of using outside resources for other disciplining practice. The results of this study do support the idea of intergenerational transmission, therefore it should also be considered as an explanation for choice of discipline method in the future. The way a parent disciplines their child is very important to the well being of the child and the relationships within the family. The authors hope that current and future parents can use this study as a resource for understanding their own discipline practices.

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Survey of Vocational Evaluators' Assistive Technology Knowledge and Usage

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Keywords: Vocational Evaluation Rehabilitation Counseling Vocational Assessment Assistive Technology Persons with Diabilities

Abstract
Technology is a major part of the world today. For Americans without disabilities, technology makes tasks easier. For Americans with disabilities, technology makes things possible. Without consideration of technology during the evaluation process, vocational evaluators are allowing the individual's current functional limitations to dictate vocational options and could be considered invalid and discriminatory (Langton, 1991). Despite this, assistive technology is being underutilized in the vocational evaluation (VE) process (Langton, Smith, Lown, & Chatham, 1998). Assistive technology is considered any technology that is used during the rehabilitation process (30th Institute on Rehabilitation Issues, 2003). The McCarthy Vocational Evaluation and Assistive Technology Survey (MVEAT) was created and administered to VE professionals to generate current information on this topic. Vocational Evaluator knowledge and usage of assistive technology in this study was similar to data gathered a decade earlier (Reed & Fried, 1995). This study found that the majority of VE practitioners used online resources to find information related to AT. Implications of these findings to the field of VE and recommendations are discussed.

The field of vocational evaluation (VE) emerged in response to a demand for improved vocational assessment techniques that did not discriminate against individuals with disabilities. When compared to traditional normative groups on mental tests or performance based measures, persons with disabilities often scored below average. This score was often a reflection of their disability and not their true abilities. Developed from a combination of many professions, vocational evaluation (VE) utilized a set of procedures that helped to eliminate the discriminatory nature associated with traditional assessment (Vocational Evaluation & Work Adjustment Association (VEWAA), 1975).

Vocational evaluation is a comprehensive, systematic process in which the client and evaluator work together to assess the client's vocational interests, abilities, strengths, weaknesses, aptitudes, and functional limitations (Pruitt, 1986). Each of these variables is looked at in relation to the client's preferred rehabilitation goal or employment outcome. Incorporating assistive technology (AT) into the VE process provides modern, creative solutions necessary to determine ability often masked by the functional limitations of a disability. For persons with severe disabilities, AT can provide solutions to make the impossible a reality.

The term "assistive technology" is commonly used to refer to technology that is used during the rehabilitation process (30th Institute on Rehabilitation Issues (30th IRI), 2003). Considered any piece of equipment, device or strategy used to increase functional

capabilities of individuals with disabilities, AT can be acquired commercially off the shelf, modified, or customized. AT products can range from low-tech, inexpensive items to high-tech, costly options.

Several studies have addressed the topic of AT in VE. When subjects were asked to appraise their knowledge of AT devices and services, Reed and Fried (1995) found the most common response to be *limited*. Langton (2003) established similar results nearly a decade later with subjects rating themselves as a 6.14 on a 10 point scale of AT knowledge. In the 1995 study, 39% of respondents indicated they had no AT training, with the majority reporting 2-8 hours. Subjects in the 2003 study reported lack of training opportunities as the major cause for limited knowledge, with nearly 95% of respondents in both studies indicating a need for AT training. Use of AT during the evaluation process was investigated by both studies. Reed and Fried (1995) indicated that 67.2% of respondents used AT during the hands-on phase of the evaluation *never*, *seldom*, or *occasionally*. The Langton (2003) study found similar results. Based on these results, it is evident that persons with severe disabilities do not always receive necessary accommodations that have the potential to increase their vocational options.

The purpose of the current study was to generate an updated baseline of information regarding vocational evaluators' knowledge and usage of AT. Notable findings of this study will enhance vocational assessment of persons with disabilities by identifying areas in need of improvement. Furthermore, this study has helped identify future research directions related to the integration of AT into the VE process.

Methods

Participants

A convenience sample of rehabilitation professionals attending the 13th National Forum on Issues in Vocational Assessment and Vocational Evaluation were surveyed. The sample for this study consisted of any rehabilitation professional involved, in some capacity, with the vocational assessment of persons with disabilities.

Age of the respondents ranged from 24 to 67 years with mean age of 48 years. Respondents reported vocational evaluation experience ranging from 0 to 37 years with a mean of 15 years experience. Forty-one respondents were female (61.2%) and 26 were male (38.8%). Fifty-five (82.1%) respondents indicated they had attained education at a Master's degree or higher (see table 1). Twenty-seven (40.3%) reported holding a Certified Vocational Evaluator (CVE) designation.

Table 1

Highest Educational Degree Obtained

Degree	Frequency	Valid Percent
Bachelors	12	17.9%
Masters	44	65.7%
Ed.S.	3	4.5%
Doctoral	8	11.9%

Instrumentation

The McCarthy Vocational Evaluation and Assistive Technology Survey (MVEAT) was designed specifically for this study to assess AT use among vocational evaluators. The instrument was created based on a review of current literature, modification of a 1995 AT Survey, and assistance from a faculty member with a considerable amount of research in the area of VE. The MVEAT consisted of 25 items and was divided into four sections: demographics, AT education and background, AT resources, and current applications of AT in evaluation process.

Content and face validity for the MVEAT was determined using a pilot study consisting of subject matter experts. Three certified vocational evaluators from Stout Vocational Rehabilitation Institute (SVRI) in Menomonie, WI were given a copy of the instrument and a review form. By signing the review form, the evaluators indicated they perceived the instrument to accurately appraise a vocational evaluator's knowledge and utilization of AT. All evaluators involved in the pilot study signed the forms suggesting the survey instrument measured the intended content.

Data Collection Procedures

The MVEAT was distributed at the Thirteenth National Forum on Issues in Vocational Assessment at Auburn, Alabama from April 25 through 29, 2007. Attendees of the forum were involved, in some capacity (e.g. practitioner, educator, administrator), with evaluation of persons with disabilities. Hardcopies of the MVEAT were provided to VE professionals not attending the conference in Kansas, Virginia, and Maryland via colleagues attending the conference.

The researcher distributed the survey at a designated table near the registration desk. Forum attendees were asked to complete the five-page survey directly on the document provided and return the completed survey to the survey box on the table. Electronic and other alternate formats were available to participants. If participants chose to take the survey and complete it off-site, they were provided a self-addressed stamped envelope with instructions to return it to the research by Tuesday May 15, 2007.

Results

Subjects identified types of AT training and total hours of training received. Thirty-three (50%) of respondents reported over 20 hours, nine (13.6%) reported 15 to 20 hours, eight (12.1%) reported nine to 14 hours, nine (13.6%) reported three to eight hours, and seven (10.6%) reported less than two hours of training in the area of AT. When asked how often AT was used during the "hands on" (work samples, community-based assessment etc.) phase of the evaluation, 28 respondents (41.8 percent) indicated *occasionally* (see table 2).

Table 2

Use of Assistive Technology During the Hands-on Phase of Evaluation

	Frequency	Valid Percent
Never	3	4.5%
Seldom	18	27.3%
Occasionally	28	42.4%
Frequently	15	22.7%
Always	2	3%

Respondents indicated their level of agreement with the statements "my professional skills in AT meet my current needs" and "my current employer encourages AT education." Based on a 5-point scale where 1 equals *strongly disagree* and 5 equals *strongly agree*, responses to both questions were M=3.22 (SD=0.92) and M=3.78 (SD=0.82) respectively.

Subjects were asked to indicate the source they used to answer AT related questions. Online resources stand out as the most common resource used. The least common sources reported were physical therapists.

When asked if additional AT information would help them in their work, 59 respondents (90%) perceived a need. Of the 59 who perceived a need for additional information 56 (86.2%) indicated additional education on specific AT devices would help them in their work, while 47 (72.3%) reported they would like more information on how to incorporate AT in VE.

Participants were asked:

> Over the course of your career in VE and Assessment, estimate the percentage of the clients you served where integration of AT during the assessment process may have increased employment options.

On average, respondents estimated that approximately 30% of past clients may have had increased employment options as a result of AT integration into the assessment process. Responses ranged from zero to 100 percent.

Discussion

The amount of AT knowledge and usage reported in this study is consistent with earlier studies by Reed and Fried (1995) and Langton (2003). Although there is no "standard" for an appropriate amount of AT knowledge, an overwhelming majority of practitioners asked for AT education in this and previous studies and have not received it. Reasons for this have been most commonly cited as lack of training opportunities (Noll et al., 2006).

This study found an overwhelming majority of practitioners using online resources to answer their AT related questions. This indicates that practitioners may be doing the next best thing to receiving AT education to increase their knowledge of AT. Practitioners realize the important role AT plays in the assessment of persons with disabilities as many indicated employment options would have been increased with AT integration.

Assumptions and Limitations of the Study

There are three primary assumptions of this study: 1) this was a representative sample, 2) the instrument was valid and 3) the participants responded accurately. Caution should be exercised generalizing these results to other settings. Although collecting data onsite at a professional conference yielded an abundance of responses, the sample is not randomized and may not be representative of all vocational evaluators. The instrument was also intended to collect general information on AT in VE and did not focus on any specific area within the topic.

Recommendations

This research indicates that vocational evaluators have limited knowledge of AT. Practitioners reported additional education in the area of AT is necessary. In order for this to occur, AT information needs to be integrated into college level vocational evaluation courses, continuing education courses, on-the-job training, and mentorship training. This will provide more awareness and knowledge of AT for future and current vocational evaluation professionals in order to increase vocational options for clients.

College level courses in AT need to be available to VE students. Specific courses such as principles of VE, laboratory courses, and practicum experiences need to include AT information. Rehabilitation agencies that provide VE services need to provide continuing education opportunities related to AT. Assistive technology organizations such as Rehabilitation Engineering and Assistive Technology of North America (RESNA) may be able to provide training ideas and opportunities for VE practitioners in addition to the latest information.

A high rate of use of online AT resources was indicated by this research. Given the limited research available on this subject, more information is necessary. This can only be accomplished by conducting research on the subject. It is recommended that future research focus investigation on the use of online resources.

Conclusions

Compared to earlier studies, this research project revealed limited progress in the use of AT in the VE process. Practitioners are using online resources, but AT continues to be underutilized directly in the VE process. Stagnation indicates VE as a profession struggles with integration of AT into the evaluation process. Evaluating previous attempts to remedy the issue and using that information in future research is the first step towards much needed change. It is with these recommendations of providing more diverse education to VE students and practitioners and further investigating use of online resources, AT integration into the VE process can be achieved.

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Impact of Guardian Relationships on Committed Relationships and College Students

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Key Words: divorce, attitudes, college students, marital status

Abstract

Over the past couple of decades, America's divorce rate has sky rocketed to almost half of all marriages ending in divorce. This study investigated the attitudes of male and female college students from a Midwestern college towards committed relationships based on their parents'/guardians' marital status. It was hypothesized that college students' attitudes would be affected by their parents' marital status based on the Social Learning theory, which assumes that individuals often behave in ways that were modeled for them and that parents are some of the most powerful models. Survey data was analyzed using frequencies, cross-tabulations, and a reliability analysis. Results indicated that college students agreed that their parents' marital status affected their views on committed relationships. These findings were supported in the literature and supported the hypothesis. Implications for practitioners and future researchers include helping couples develop skills to maintain their marriages.

Every year one million marriages end in divorce. During divorce, children are exposed to emotional and psychological stress due to having their families torn apart. Divorce conflict between parents can leave an everlasting impact on a child's view of the sanctity of marriage (Baker, 2005). A child's most influential role models are usually their parents. The child's own ability to form stable and healthy relationships can be affected by parental divorce or conflict (Sinclair & Nelson, 1998). Literature reviewed studied the impacts of parental divorce on college students and their attitudes towards committed relationships.

In order to research the effects of parents' relationships on young adults, the authors reviewed several studies conducted in the last ten years regarding the impact of parental divorce on college students. The literature focused on the impact parental divorce has on young adults. Some of the major impacts found in the literature were: lack of trust, low self esteem, divorce, levels of intimacy, love styles, and attachment. The authors did not find a study regarding the attitudes of college students towards committed relationships as it relates to the relationship their parents had (Hall,2006; Baker, 2005; Sinclair & Nelson, 1998; Sprecher, Cate & Levin, 1998).

Hall (2006) found that beliefs and values of marriage by young adults will most likely reflect the way they act towards marriage. This shows the impact parents' marital status has on children and young adults. This article also found that young adults may base their future relationships on past dating experiences, relationships with friends and their experience with family. These experiences may create negative or positive feelings towards committed relationships.

Baker (2005) found the effects of parental alienation on adult children resulted in low self-esteem, depression, drug and alcohol abuse, lack of trust, alienation by their

own children, and divorce. Each of these has an everlasting effect on children as they grow older. Because children learn how to love and treat others from examples set by their parents.

Sinclair and Nelson (1998) found that students from divorced families would not experience less intimacy than students from intact families. They also found that there was no significant difference in a person's ability to have intimacy in a relationship when comparing those participants from divorced intact families. Parental marital status is not a significant factor affecting a college student's intimate relationships. There are other factors that can lead to differences among the students such as the quality of the parent's relationships, family conflict, and the parent child relationship.

Sprecher, Care, and Levin (1998) researched the beliefs and attitudes about love and romantic relationships of college students from intact and divorced families. They found that parental divorce does not place children at a disadvantage in the development of love and relationships. If children grow up in an loving, caring environment even if their parents' divorce they will not be disadvantaged while developing love relationships. They did find that females from intact marriages had more secure attachment than those from divorced families.

The literature revealed that, among college students, there is no significant difference in the views they have on relationships depending on if they come from a divorced or non-divorced family. Previous research shows that there are other dimensions and factors affecting the views of college students on relationships. The authors will be filling a gap in research by comparing views college students have on committed relationships as well as if there is a relationship between these views and their parents' relationship status.

The theory used in this study was the Social Learning theory (Devault, Cohen, & Strong, 2005). This theory best describes human interaction and the way humans learn through set examples. Humans learn different behaviors from culture, society, and family. This theory assumes that individuals have the ability to change situations in their lives to what will best fit them and their beliefs. Children learn how to have relationships by observing their parents; this impacts the child's views on relationships later in life. Parents also influence the future decision-making process of their children through the decisions that they make in their marriage or in their divorce.

As applied to this study, this theory predicts that college students would pattern their committed relationships after their parents' relationship. For example, students with divorced parents would learn to assume that their marriages will end in divorce therefore may decide to not get married. However, this theory also indicates that choices can be made to change the outcome of relationships. Learning what did and did not work in a college student's parents' relationship gives students the opportunity to choose a different path for their future relationships.

The purpose of this study was to examine the attitudes of college students on committed relationships coming from married and divorced families. The authors hope this information will inform others, such as marriage counselors, family social science educators, high school teachers, college students, the court system, marriage and family therapists, school counselors, advisors, policy makers, and the general public. As a result of this study, the authors hope to contribute to creating ways of stability in committed relationships, and understand the lasting effects divorce has on children as they grow older and how they view relationships. The central research question in this study is "What are the attitudes of college students about the effects that their parents' relationship

has had on their own view of committed relationships?" The authors surveyed college students from a Mid-Western state university. It was hypothesized that college student attitudes on committed relationships are affected by their parents' marital status. The authors hypothesize that if an individual's parents are divorced that they too will believe that they will get divorced some day. This also relates to the Social Learning theory in that college students will follow what their parents' relationship has modeled for them. The authors also hypothesize that there will be other factors affecting college students attitudes towards committed relationships, such as love being the basis of committed relationships, believing in cohabitation before marriage to get to know their partner, having negative feelings towards marriage if a student comes from a divorced family, and believing that marriage is an everlasting commitment.

Methods

Participants

The site of this study was at a Midwestern state university. The participants were 58 undergraduate students, 31 males and 27 females all from general education classes. There were 31 participants between the ages of 18-20, 17 between the ages of 21-23, two between the ages of 24-26, and the remaining eight of participants were 27 years old or older. Thirty-six of these participants' parents/guardians were married, 11 were divorced, and 11 were never married.

Research Design

The authors wanted to see if there were similarities between the parent/guardian relationship structure and views that college students have on committed relationships. This study utilized a cross-sectional study design was and collected data via self-administered questionnaires. The rationale for using this method was that it was the most efficient method to gather the data directly from campus while allowing for convenience, low cost, and the quick return of data. This study used a nonrandom-purposive sample design in order to gather information from male and female students. The authors contacted a professor of general education courses in order to sample both males and females. The authors used a nonrandomized purposive sampling design plan. The ethical protection of human subjects was provided by completing the Human Subjects Institutional Review Board (IRB) training; this study has been approved by the IRB.

Data Collection Instrument

In order to address college students' attitudes towards committed relationships influenced by their parents'/guardians' relationship, the authors developed a survey. The survey included a cover letter containing an explanation of implied consent, a description of the study, definitions of any terms not commonly known, potential risks and benefits, estimated time commitment, procedure for maintaining confidentiality, voluntary participation explanation, contact information of the research team and the supervisor, and instructions for completing the survey. The survey consisted of three demographic questions relating to gender, age, and biological parents'/guardians' marital status. The independent variable was based off of the college students' parent/guardian marital status. Participants were given seven, closed-ended statements based on a 5-point Likert scale which measured the intensity of the respondents' attitudes ranging from one (strongly disagree) to five (strongly agree). Questions were based on literature and theory about parental marital status, divorce, intimate relationships, and commitment.

The survey instrument used has both face validity and content validity. Because the questions and concepts addressed in the survey are literature and theory inspired, the authors feel there is adequate evidence of face validity. The authors believe each statement in the survey instrument provided content covering a wide variety of opinions for respondents to relate to.

Procedure

Data for this study was collected by emailing a general education professors and asking for their permission to survey their class. After receiving permission, the authors arrived at the classroom and the professor introduced them. He also stressed the importance of research and taking the survey seriously. The authors then passed out each of the surveys, read the implied consent, and asked participants to follow along. Participants were instructed to detach the consent page to keep for themselves, and then the authors informed each participant their participation was completely voluntary and they would not experience any adverse consequences if they chose not to participate in this survey. The authors also warned the participants that if they chose to withdraw participation at a later date, there would be no way to identify which survey belonged to them because the surveys were anonymous. To preserve confidentiality, the authors and the professor stepped out of the room while the participants completed the survey. When the participants completed the survey, they were instructed to place the survey in an envelope located at the front of the room. Data was stored in a secure location until analysis.

Data Analysis Plan

The data was first cleaned and checked for any missing data. The cleaned surveys were then coded using acronyms for each variable. The first three questions on the survey were demographic variables: gender, age, parents'/guardians' marital status. The only independent variable was parents'/guardians' marital status, which was coded as *PMS*. Each survey statement was a dependent variable and given an acronym name (as seen in Table 1). The individual was used as the level of analysis. Data analysis included frequencies, cross-tabulations, mean comparisons, and a reliability analysis.

Results

A frequency analysis indicated that there was no data missing from the surveys. A reliability analysis was run to indicate if the variables were a reliable index to measure the major concept: college students' attitudes towards committed relationships that were influenced by parents'/guardians' relationship. A Chronbach's Alpha of .46 indicates that the survey items overall reliable, but weak; however, if the variable *CBM* was removed from the survey, Cronbach's Alpha would increase to .59.

Table 1

Percent Responses by Parent/Guardian Marital Status

(MSV) = I believe my parents'/guardians' marital status has affected my view on committed relationships					
PMS	SD	D	U	A	SA
Married	2.8%	5.8%	8.3%	27.8	55.6%
Divoced	0.0%	18.2%	9.1%	27.3%	45.5%
Never Married	9.1%	0.0%	27.3%	54.5%	9.1%
(MEC) = I think marriage is an everlasting commitment					
PMS	SD	D	U	A	SA
Married	2.8%	2.8%	0.0%	25.0%	69.4%
Divoced	0.0%	9.1%	0.0%	63.6%	27.3%
Never Married	0.0%	9.1%	9.1%	54.5%	27.3%
(LBR) = Love should be the basis of a committed relationship					
PMS	SD	D	U	A	SA
Married	0.0%	2.8%	5.6%	30.6%	61.1%
Divoced	0.0%	9.1%	0.0%	27.3%	63.6%
Never Married	9.1%	9.1%	9.1%	45.5%	27.3%
(PGM) = I plan to get married					
PMS	SD	D	U	A	SA
Married	0.0%	0.0%	11.1%	27.8%	61.1%
Divoced	0.0%	0.0%	9.1%	45.5%	45.5%
Never Married	0.0%	0.0%	27.3%	18.2%	54.5%
(CBM) = I plan to cohabit before I get married to get to know the person first					
PMS	SD	D	U	A	SA
Married	8.3%	5.6%	19.4%	33.3%	33.3%
Divoced	0.0%	9.1%	0.0%	27.3%	66.6%
Never Married	0.0%	0.0%	27.3%	45.5%	27.3%

(DNF) = Students from a divorced family will have negative feelings towards marriage

PMS	SD	D	U	A	SA
Married	2.8%	27.8%	55.6%	11.1%	2.8%
Divorced	45.5%	36.4%	18.2%	0.0%	0.0%
Never Married	36.4%	27.3%	27.3%	9.1%	0.0%

(FCR) = The media's focus on cohabitation relationships has impacted how I view committed relationships.

PMS	SD	D	U	A	SA
Married	33.3%	25.0%	25.0%	8.3%	8.3%
Divorced	45.5%	18.2%	36.4%	0.0%	0.0%
Never Married	27.3%	9.1%	18.2%	0.0%	0.0%

Note. (PMS) = Parents Marital Status; SD – Strongly Disagree, D – Disagree, U – Undecided, A – Agree, SA – Strongly Agree

Discussion

Overall, the hypothesis that college students' attitudes towards committed relationships will be affected by their parents' marital status was supported by the results found from the survey. These findings are supported in the literature (Hall, 2006; Baker, 2005; Sinclair & Nelson, 1998; Sprecher, Cate, & Levin, 1998).

As the Social Learning theory (Strong, De Vault, & Cohen, 2005) predicted, respondents strongly agreed that their parents'/guardians' marital status had an impact on their views of what committed relationships should include. According to Sinclair & Nelson (1998) parental marital status is not a significant factor affecting college students' intimate relationships. This does not appear to be supported by the findings of this study.

College students strongly agreed that marriage is an everlasting commitment, regardless of their parents/guardians marital status. This result agreed with the literature. Hall (2006) found that students will base their opinions of marriage on their relationships, their peers' relationships and their family. If students' parents are still married, they too believe that their marriage will last, and if a student's parents are divorced, they may base their opinions of marriage on a peer or another family member who has a successful marriage. Students may develop negative or positive feelings based off of their experiences with different relationships, which in turn can leave negative or positive everlasting effects on students.

College students agreed that love should be the basis of committed relationships; this finding is in agreement with the literature. Sprecher, Care, and Levin (1998) found divorce does not put students at a disadvantage when developing love relationships. This relates to the statement because students are not marrying or divorcing for other motives like money, but marrying because they are in love or divorcing because they have fallen out of love with their partner.

According to Hall (2006), it was found that beliefs and values about marriage in young adults will most likely reflect the way they act towards marriage. These findings show college students, regardless of their parents/guardians marital status, agreed with the statement: I plan to get married. The authors were surprised to see so many college

students have considered the thought of marriage considering a high number of the participants were underclass men.

The results from the next statement: I plan to cohabit before I get married to get to know the person first, agree with literature. Hall (2006) states that young adults may base their future relationships on past dating experiences, relationships with friends, and their experience with family. If students' parents cohabitated before marriage or if they have friends who are cohabitating, then they too may agree with cohabitating before marriage to get to know one another better.

The Social Learning theory (Strong, De Vault, & Cohen, 2005) best explains the results from the statement: Students from a divorced family will have negative feelings towards marriage. Students from married families were undecided whether or not divorce would impact students negatively. Interestingly, none of students from divorced families agreed with this statement. The Social Learning theory would suggest that students coming divorced families make the choice to see marriage as an everlasting commitment rather than following in the footsteps of their divorced parents. Lastly, students from never married families mainly disagree or strongly disagree that students from divorced families will have negative views of marriage. The authors think this result could result from believing in the best possible outcome of marriage even though their parents did not model a good marriage for them. Regardless of their parents'/guardians' marital status, students ultimately have the ability to decide for themselves what committed relationships mean to them.

The last statement was: The media's focus on cohabiting relationships has impacted how I view committed relationships. Students from married and divorced families both disagreed that the media impacts how they view committed relationships. These findings are best explained by the Social Learning Theory (Strong, De Vault, & Cohen, 2005). These opinions could be because students have their own parental models at home to impact their approach to relationships. Students whose parents/guardians were never married agree that the media's focus on cohabiting relationships has impacted how they view committed relationships. This may be due to them using media images such as traditional families represented in the media as role models to compare to their own life.

Limitations

One limitation is that this sample size was small and therefore the authors were not able to generalize to a population beyond the characteristics of this sample. Another limitation was the lack of cultural diversity within the sample.

Implications for Practitioners

These results show that college students still believe that love and marriage are everlasting commitments regardless of if they are from a married, divorced, or never married family. Practitioners should consider, while working with clients, people desire everlasting relationships but something is preventing them from attaining the everlasting relationships they desire. When working with clients, practitioners should focus on relationship strengthening activities, helping clients become better aware of ways to work through conflict, and on better communication skills. These techniques will provide clients with better knowledge to work through conflict when it arises in relationships and thus contribute to relationship stability.

Implications for Future Research

The authors recommend that future research use a larger, random, and more culturally diverse sample to generalize to college students' attitudes across the country. If this study were to be replicated, the authors suggest rewording or discarding one of our statements (CBM): I plan to cohabit before marriage to get to know the person first. According to reliability statistics, the Cronbach's Alpha would increase from .46 to .59 if the statement (CBM) were taken out of the survey. The authors speculate that this statement does not flow with the other statements and may have been misinterpreted by the respondents. This may be due to that fact that many respondents were young and may have not considered their future living with a partner or they did not know the definition of cohabit (cohabitate).

Conclusion

In spite of the continuing high divorce rate in this country and cohabitation outpacing marriage, the authors found that college students still believe in love and everlasting committed relationships, including marriage. Given these two opposing forces, the authors speculate that most people in society wish to have everlasting relationships but something is preventing them from doing so. The authors hope that these findings will help marriage counselors, family social science educators, teachers, marriage and family therapists, the court system, policymakers and the general public to recognize and work on building skills to maintain stable and healthy committed relationships.

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Elements of Community Visioning: A Perspective

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Keywords: Community visioning, intervention, community planning, future, global drivers, catalyst for change, collaborative

Abstract

Visioning has found success for individuals, organizations and communities as an intervention for change. This process is used as a catalyst for change that involves all stakeholders. Although visioning has some disadvantages, the process has found high levels of success and has made significant social, environmental, and economic impacts on communities and their members. Within this paper, elements of the process of visioning and its advantages and disadvantages will be discussed. An example of how the Wisconsin Rapids intervention was conducted and the subsequent results will be examined.

The word "visioning," at its most elementary level, can conjure up dreams of seeing into the future or looking into a crystal ball to see a glimpse of events to come. Although visioning in this respect may not seem to relate to the community, it is essentially at the heart of what community visioning is. Visioning requires dreaming and using the most active parts of one's imagination.

In a professional sense, visioning is a term used to refer to a personal, organizational, or community intervention in which individuals or members develop and describe their desired vision of the future (French & Bell, 1999). Within the development of the vision, a time frame is usually set some distance into the future. This imagined future may be anywhere from six months to 30 years in the future. Community members are required to imagine the future as they would like to see it in the most pristine or perfect sense. In essence, the participants are creating a mental paradise for life in the future for themselves, their organization, or their community. This intervention is focused on the most positive aspects of the future and does not dwell on problems or figurative bumps in the road.

The Basic Visioning Process

Techniques for launching the visioning process can vary. Sometimes there is a catalyst that requires this type of intervention, other times there is a perceived situation in the future that requires future planning. Whether it is a catalyst or a part of a planned process, a visioning process can begin in different ways.

Although some prefer quiet reflection time and small phrases to record the vision, others feel working with abstract objects or tools allow the imagination to flourish (French & Bell, 1999). They believe going beyond the pen and paper allows the imagination to become more fluid for a better vision to be imagined. Although the catalysts for launching the vision vary, the following components are relatively the same. These components include: the sharing of the vision without debate, the refocusing of the vision whereby all members buy into the newly created vision, and the development of an action plan to make the vision a reality (French & Bell, 1999; Clemmer, 2006). These

components may not happen during the first session of visioning, but they are essential if the overall intervention will find success.

Community Visioning

One major use of visioning is in the community. This type of intervention gathers community members together to develop and describe their vision of what they want their community to be like in the future. The time frame may be anywhere from six months to 20 or 30 years in the future. Like all forms of visioning, this technique uses images of potential rather than problems as starting points for change (French & Bell, 1999).

The objective of visioning is to make a difference for the community by creating a vision for the preferred future and then developing the capacity to make that vision a reality. Visioning helps define where a community wants to be and provides a framework for determining strategic actions. It is a grassroots movement and provides confidence in community support.

Advantages to Community Visioning

There are numerous advantages to community visioning. This technique utilizes a broad range of viewpoints and expertise in the community. Through this group process, ideas can be tested, discussed, and refined by people with diverse perspectives. Community leaders can gain residents' commitment by implementing action-oriented activities and team-building activities to foster cooperation among the members of the community. The visioning process broadens everyone's understanding of the issues, challenges, and opportunities facing the community.

In many cases, community planning is done by the economically elite. The community visioning process is unique in that it reflects a variety of perspectives inside the community and is formed through careful dialogue and thought. When each member is allowed to contribute to the visioning process without immediate debate, a variety of perspectives are allowed to be heard. The process itself invokes pride in the community and stretches thinking, when a positive future is envisioned for the community. This represents a critical focal point and the beginning of high performance.

Peter Senge (1994, p. 214) believes that "the origin of the vision is much less important than the process whereby it comes to be shared." He suggests that a vision is not truly shared until it connects with the personal visions of people throughout the community. In this sense, the focus of a visioning project is to hear all voices of the community. Through the process of community visioning, a variety of perspectives from the group are shared. Although visioning can sometimes be reflective of the most ideal and almost impossible to achieve scenarios, it does allow for thinking beyond the normal goals and objectives that often limit the community by the wants of only a few.

Disadvantages of Community Visioning

On the downside, this intervention does require long-term commitment. In some communities, this commitment could span decades and generations. It can also span significant advances in technology, changing demographics, and culture shifts that interfere or make the original vision obsolete. This intervention requires the willingness to make significant changes and leaps beyond normal thinking, especially when groups have primarily held traditional views or evidenced short-sighted thinking when creating goals or objectives.

The development of a marketing plan is often necessary to communicate the message to citizens in the community. Finding solutions to working around an individual or group's agenda can also pose a challenge. It may be challenging to give a healthy balance of attention to each of the areas determined to be important in the community. For example, equal attention would need to be devoted to issues in the following areas: environmental, social, financial, human, political and cultural (C. Loden, personal communication, April 2, 2007).

A final requirement that may hinder this intervention is that once an action plan is created, it takes conscientious follow-through and nurturing if it will become a reality in the future (Clemmer, 2006). This goes beyond a dedication of time or group of individuals that foster the original vision; it takes the whole community and the future community to make the vision a reality.

Characteristics of Communities with a Common Vision

Communities that have engaged in creating a common vision generally have a population with a higher average level of education (J. Fox, personal communication, March 30, 2007[1]). These communities tend to benefit from an upward trend in employment and a downward trend in the percentage of population not in the labor force. They typically provide adequate products and services to their residents and possess the administrative and managerial capacity to run and promote their community. These communities also tend to have a higher proportion of owner-occupied accommodations and a lower proportion of rented accommodations.

Communities who vision often have a younger population and a healthy exchange of ideas internally. These communities have a higher proportion of residents working in the creative class (scientists and engineers, university professors, poets and architects) and possess community foundation resources made available by members of the community for collective benefit (J. Fox, personal communication, March 30, 2007). They generally have high-tech occupations and industries and a lower proportion of lower skilled jobs. This contributes to the availability of a variety of experts to provide the breadth of services that residents expect. Communities who engage in the visioning process typically have an optimistic attitude towards change and benefit from decentralized decision making.

Case Study of a Community Visioning Intervention

In 2004, the Wisconsin Rapids/Biron/Grand Rapids areas of Wisconsin initiated the internationally recognized Community Progress Initiative, which used community visioning as a key component to engage citizens to take an active role in creating their future. The primary goals of the project are to create a business-friendly environment and empower entrepreneurs, shape a shared vision for people throughout the region, create new jobs, build the area's endowed charitable assets to support sustainable community development, motivate emerging leaders to drive positive change, and inspire community spirit and pride (Progress Initiative, 2005). Community Progress Initiative encourages citizens to learn about and actively participate in this process to build a strong and positive community while simultaneously creating a business friendly culture.

This process began at the first stakeholder invitational meeting, when the outside facilitator described the major emerging global drivers impacting the world. Based on the deliberations of the 2007 World Economic Form, these drivers were identified as increased energy consumption and use, wealth in the United States being distributed to

fewer people, a dramatic increase in wealth and workforce size in China and India, a decline in United States economic power in the world, and media power shifting to the internet and away from traditional media (D. Beurle, personal communication, March 30, 2007[2]).

The second step in the process was to have the community stakeholder attendees identify key forces or drivers shaping the future of the local region. These key forces were described and clarified during a brainstorming session, and tallied by the facilitators. Identified key drivers potentially shaping the Wisconsin Rapids region included the entrepreneurial culture and environment, agriculture, climate change, downtown revitalization, and tourism (Progress Initiative, 2005). Through the collaborative process, each driver was rated on importance for the future and its degree of uncertainty. The drivers were then mapped on two axes; one axis depicted the level of uncertainty while the other denoted the level of importance. Drivers that rated high on both factors were examined and from these seven cluster networks were identified: Cranberry Agriculture, Downtown Revitalization, New E-conomies, Paper and Forestry Products, Small Business Development, Tourism, and Workforce Training and Education (D. Beurle, personal communication, March 30, 2007).

With the identification of the clusters, the stakeholder attendees defined four plausible future directions for the region and developed detailed narratives of the implications of each of the four possible directions. This process is known as Scenario Shaping of Clusters of Drivers (C. Loden, personal communication, March 30, 2007[3]). Through a societal, economic, and environmental filter, this process projects what a particular cluster might look like if there is too much or too little development. It is a valuable exercise because people are able to think about what potential scenarios could look like in 20-30 years. For example, if the Tourism Cluster were to be developed too rapidly and without enough planning, initially the business could be seen as good but in the long run it could be detrimental to the overall image and/or value of the community as a whole (D. Beurle, personal communication, March 30, 2007).

The purpose of the Scenario Planning Process is to identify a preferred future and the key strategic actions needed to move towards the preferred scenario. In the case of the Wisconsin Rapids/Biron/Grand Rapids areas, the community stakeholders did some modeling to predict what things would look like and identified specific objectives and actions for each of the clusters. For example, the New E-conomies Cluster had three objectives: address the technological concerns of the community and develop an excellent technology structure, form an Ideas Incubator to match ideas to resources in the community to create a system for the growth of new ventures, and create a Portal Website[4](Progress Initiative, 2005). The cluster group's specific tasks were to form committees and map out the phases, timeline, and objectives of the Portal Website as well as procure a grant for the development of the Ideas Incubator.

The Community Progress Initiative was initially a three-year project, but the community has chosen to continue the project to focus on making a stronger future happen for all citizens (Progress Initiative, 2005). Citizens involved in the Community Progress Initiative realize that joining a cluster group is one of the most viable ways to build the community. People in the Wisconsin Rapids/Biron/Grand Rapids areas have aligned themselves around a preferred future and are able to see beyond their own self-interest to build that future. The visioning process started to show how the pieces fit together, and through this process, the citizens began to see a greater role in their community (D. Beurle, personal communication March 30, 2007).

Continuing the Visioning Process

The visioning process has been refined and practiced with successful results in engaging new leadership in communities. It is extremely inclusive and uses a widely communicated, open call to action to encourage maximum citizen participation and create excitement about the future. This process, however, must be supported by specific plans to implement and maintain the vision. Community leaders have to commit to the process itself as the visioning must have follow-through and nurturing. It remains a perpetual process that is always looking towards the potential future of the community, by revisiting and reshaping the vision each year. This is not a onetime process, but the beginning of an ongoing mission for the community. The Wisconsin Rapids Community Progress Initiative is currently celebrating its fourth year and has been recognized internationally as a model in community economic development by the International Community Development Society as the 2006 Innovative Project (Progress Initiative, 2005).

Conclusion

Although visioning can be an ideal catalyst for change, there are always limitations to its success. Due to its time commitment and longevity, visioning must be fostered beyond the individual or small group level. It cannot be the vision of just a few in a community or the elite, it must be fostered and respected by all stakeholders.

With limitations clearly realized, visioning in communities can make a profound impact. As in the case of the intervention in the Wisconsin community, major components of the community were affected. These components include the society as a whole, the economic sector, and the environment. Although visioning may take a significant amount of time to realize, the process of creating the vision and the journey towards that ultimate dream have immediate benefits for communities.

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Footnotes

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[3] Connie Loden, Manager of Loden Consulting Services, Certified Economic Developer, Past-President of Wisconsin Rural Partners and Wisconsin Rural Leadership Program, Vice-President of Operations for the Community Development Society, Executive Director of Heart of Wisconsin Business and Economic Alliance.

*Portal Website is a collaborative effort to bring together community resources, link them to one site that brands the Central Wisconsin area and make the area's assets visible to a wide audience.

The Effect on Lipid Profiles after Supplementation of Cranberry Seed Oil

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Key Words: Heart disease, lipid profile, cholesterol, cranberry seed oil

Abstract
The purpose of this study was to determine the effects of supplementing cranberry seed oil to a population who had borderline high to high total blood cholesterol levels (>200 mg/dl). A total of 19 participants completed this research study. The experimental group consumed cranberry seed oil daily for eight weeks. The control group consumed canola oil daily for eight weeks. At weeks one, four, and eight a lipid profile test was conducted on each subject. A decrease of 5.7 mg/dl in total cholesterol occurred in the experimental group after just four weeks, with an increase of 4 mg/dl in HDL. These results warrant further research into the in vivo effects of cranberry seed oil supplementation.

Cranberries are a major contributor to Wisconsin's economy. According to the Economic Research Service of the United States Department of Agriculture, Wisconsin was the leading producer of cranberries in the year 2006 (USDA, 2006). The majority of harvested cranberries are further processed to make fruit juice, however, the processing of cranberry juice uses only 85% of the total cranberry. The other 15% of the cranberry consists of the skin, seeds, and pomace. This portion is often thought of as waste when in actuality is the most nutritious part of the fruit because it is packed with powerful antioxidants that have the potential to help fight heart disease (Fruit Essentials, 2006).

Heart disease is the number one cause of death for both men and women in the United States (Centers for Disease Control and Prevention, 2007). High levels of saturated fat and cholesterol in the diet can cause blood cholesterol levels to increase (National Institute of Health, 2005). Excessive cholesterol builds up in the blood, leading to plaque formation and hardening of the arteries. This condition is known as atherosclerosis, which is the leading cause of heart disease, stroke, and heart attacks (U.S. Food and Drug Administration, 2004).

Recently, the oil from cranberry seeds has been analyzed and found to contain a ratio of 1:1 omega-6 polyunsaturated fatty acids (n-6 PUFA) to omega-3 polyunsaturated fatty acids (n-3 PUFA) , all eight isomers of vitamin E, plant sterols, phospholipids, and flavonoids, which have been shown to help reduce cholesterol and thus considered a heart healthy fruit (Fruit Essentials, 2006). Several clinical studies have concluded that 400-800 IU/d of vitamin E is an effective treatment for coronary artery disease (Jial, 1993). Vitamin E does this by reducing the liver's production of cholesterol, inhibiting LDL oxidation, and by being an effective anti-coagulant (Pedersen, 2000).

Even with many benefits attributed to the components of cranberry seeds and oil, to date there has been no published research conducted on the potential benefits of cranberry seed oil supplementation on cholesterol levels in human or animal subjects. It is postulated that the components found in cranberry seed oil may have the potential to effectively alter cholesterol levels.

Method

Subject Selection and Description

The study was a randomized blind-controlled clinical trial. This study utilized a total of 19 volunteers that were 18 years of age or older, not taking any cholesterol altering medications and all had a total blood cholesterol level greater than 200 mg/dl. Lipid profile tests were obtained for all interested participants prior to the start of the study through a blood draw by a certified laboratory technician. At four and eight week intervals, the participants were tested for their lipid profile.

Samples

The samples used in this study were canola oil and cranberry seed oil. Wesson® brand 100% canola oil (lot number 69084-FGC GF2566) was used in the control group for the full eight weeks of the study. The cranberry seed oil used in the experimental group was manufacutred by BGL, LLC (Wisconisn Rapids, WI). The control group was to supplement one tablespoon canola oil per day and the experimental group was to supplement one tablespoon cranberry seed oil per day. At four and eight weeks both the control and experimental groups were tested for their lipid profile.

Equipment

The equipment used for the blood draw included evacuated blood collection tubes, disposable vacutainer holders, gauze pads, tourniquet (single use – disposable – latex free), biohazard needle disposal unit, band-aids, cloth/tape, or stretch bandage wrap, latex-free gloves, and syringes.

Data Analysis

All of the participants' lipid profile tests were analyzed at Red Cedar Medical Center, Menomonie, Wisconsin. The lipid profile results from weeks one, four, and eight were entered into Statistical Package for Social Science (SPSS) statistical software to compare one, four, and eight week profiles among the participants in the experimental and control group. Means and standard deviation for lipid profile were calculated at week one, four, and eight. The differences in total cholesterol, LDL cholesterol, HDL cholesterol, and triglycerides from week 1 and four and week one and eight for both the control and experimental group were calculated using SPSS. The pooled 2-sample t-statistics were calculated for each, and significance was set at □=0.0

Results

Total Cholesterol

There were noticeable reductions in total cholesterol in the experimental group after just four weeks of consuming the cranberry seed oil, although not statistically significant ($p<0.05$), $t(17) = -1.48$, $p = 0.16$. The mean week one total cholesterol value for the experimental group supplemented with cranberry seed oil was 240.6 mg/dl with a 5.7 mg/dl decrease at week four, compared to a mean week one total cholesterol value of 233.2 mg/dl for the control group having 3.2 mg/dl increase in total cholesterol at week four (Table 1). The mean week eight total cholesterol value for the experimental group was 247.9 mg/dl, compared to the mean week eight total cholesterol value of 241.2 mg/dl in the control group (Figure 1). One subject in the experimental group was noted to have a 34 mg/dl (13.6%) reduction in total cholesterol at week eight, thus demonstrating the potential improvements in different individuals.

Table 1.

Adjusted Mean (M) and Standard Deviation (SD) Results of Lipid Profile for Control and Experimental Groups[1]

	Week 1		Week 4		Week 8	
	Control	Experimental	Control	Experimental	Control	Experimental
Total Cholesterol (mg/dl)	233.2 ± 27	240.6± 20	236.4 ± 27	234.9 ± 20	241.2 ± 43	247.9 ± 40
LDL cholesterol (mg/dl)	146.3 ± 26	149.3 ± 21	150.3 ± 23	143.9 ± 19	153.0 ± 34	147.9 ± 18
HDL cholesterol (mg/dl)	65.1 ± 14	60.60 ± 16	65.11 ± 15	64.30 ± 16	66.56 ± 17	62.10 ± 16
Triglycerides (mg/dl)	110.8 ± 41	156.20 ± 56	106.6 ± 42	134.60± 65	110.9 ± 38	151.20± 71

[1] Control N = 10; Experimental N = 11; HDL = high density lipoproteins; LDL = Low density lipoproteins

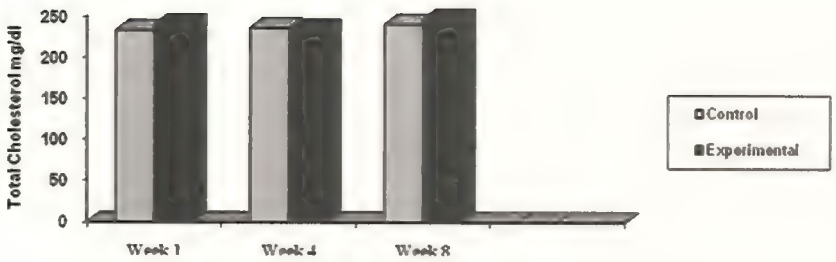

Figure 1. Mean total cholesterol values in (mg/dl) at weeks one, four, and eight

LDL Cholesterol

There were also vast reductions in LDL cholesterol in the experimental group supplementing cranberry seed oil at weeks four and eight, although not statistically significant ($p<0.05$), $t(17) = -2.01$, $p = 0.06$. The mean week one LDL cholesterol value for the experimental group was 149.3 mg/dl, but after four weeks, the LDL decreased to 143.9 mg/dl (Figure 2). It was noted that one individual subject in the experimental group had a 24 mg/dl (12.1%) decrease in LDL cholesterol at week eight. The control group had a mean week one LDL cholesterol value of 146.3 mg/dl, which increased to 150.3 mg/dl at week four and again to 153 mg/dl at week eight (Figure 2). Keeping LDL cholesterol levels at a healthy level is vital for heart health, because, when LDL cholesterol accumulates in the blood stream plaque formation can occur; this increases the risk for heart attack and stroke (Escott-Stump & Mahan, 2004).

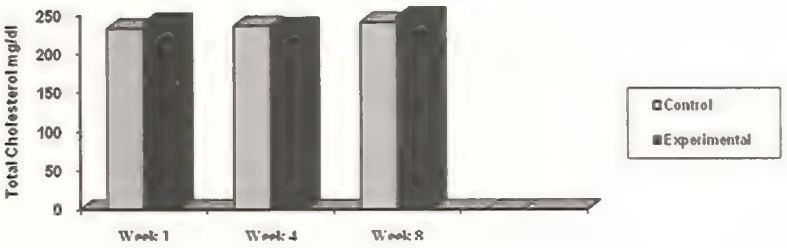

Figure 1. Mean total cholesterol values in (mg/dl) at weeks one, four, and eight

HDL Cholesterol

Vast improvements were found in the experimental group after four weeks of cranberry seed oil consumption, although not statistically significant ($p<0.05$), $t(17) = 1.28$, $p = 0.22$. The mean week one HDL cholesterol value for the experimental group was 60.6 mg/dl, which increased to a mean HDL cholesterol value of 64.3 mg/dl at week four, and again increased slightly from week one to 62.1 mg/dl at week eight (Figure 3). In addition, it was observed that one subject in the experimental group had an 11 mg/dl (18%) increase in HDL cholesterol at week eight of the study The control group demonstrated no change in HDL cholesterol value at week four (65.1 mg/dl), however, they did have a slight increase of 1.5 mg/dl at week eight. . Maintaining adequate levels of HDL cholesterol play a key role in heart health. HDL cholesterol helps transfer the LDL cholesterol "bad cholesterol" to the liver where it then is excreted out of the body through bile acids. Excreting excess LDL cholesterol from the bloodstream assists in protecting the heart from plaque formation and heart disease (Groff, Groupper, & Smith, 2005).

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Manuscript Preparation

Text, Content, and Style Layout

Submissions considered for publication must **be double-spaced in 12-point Times or Times New Roman font**, following the standard 8.5 x 11 page margins, and be completed using the Microsoft Word format. No specific length of manuscript is required but **it should not exceed 3,500 words (14-page limit)**. The body of the article should follow a clearly organized order of information presentation and can be written in either past or present tense as long as the manuscript is consistent with American Psychological Association (APA) 5th Edition guidelines. Included in each submission should be a clearly defined introduction, main body, and closing remarks. See the basic outline for APA style papers below. While your discipline might use a different format, please submit an article as close to APA standards as possible as this is the format the Journal uses.

Because you are submitting your article for publication, your submission should be free of any spelling or grammatical errors and sentences should be coherent. Furthermore, do not use first or second person references. Paragraphs should be well structured and contain an introductory sentence and at least three to four supporting sentences. Ensure that your faculty research advisor proof reads your article prior to submitting it to the Journal.

Tables and graphics must be in APA format. Tables should be easy to read, include a clear, concise title, and be able to stand on their own (your reader should be able to understand your table or figure without reading your text). Graphics need to be saved in .EPS or .TIFF format to ensure they have the best resolution possible and their effectiveness is not compromised during the production process. Be sure to submit these files separately; however, keep the image in your Word file so we know where to place the high-quality image.

Signature Page

Upon submitting your article for publication, you must also submit a signature page that can be found on the Journal's website. Your signature indicates that you have proof-read your submission and have every intention of following through with the editing process. In addition, your advisor must sign the document as an indication that he or she is aware that you are submitting your work for publication. You and your advisor must sign this document before the editor will review your submission.

Basic APA Research/Study Paper

Cover Sheet and Abstract

The cover sheet should include the following information:
A running header
Title of the article submission (not exceeding 60 characters)
Student Author's name
Research Faculty Advisor's name

Excluding the article title, none of the former information should be found anywhere else in the article submission to ensure anonymity during the blind review process.

The following page should include the article title at the top of the page followed by the abstract. This abstract should be used as an opportunity to give the reader a preview of the article and what conclusions were reached due in part to the contributions of the research. The abstract should be approximately 110 words.

Introduction

The title of your article (centered) should be the first text on this page. Introduce the problem or issue being studied and tell your reader why this topic is important. Review pertinent literature in order to determine what kind of research has already been undertaken regarding your topic. When summarizing literature, be sure to include basic information about the authors' participants, methodology, and findings with regard to your topic. Finally, clearly explain the purpose of your study, operational definitions, and your hypotheses.

Method

Participants or Subjects

Describe the participants or subjects of your study. This section includes general information such as number of participants or subjects, demographic information, and any other basic information about the participants or subjects that will be useful in your study (such as how many participants are in each independent variable group).

Apparatus or Materials

In this section, describe the materials or data collection tools that you used to gather your data. Copies of data collection tools are usually not necessary for the Journal.

Procedure

Tell your reader what you did in your study. You should give them just enough detail to be able to replicate your study without providing so much extraneous information that your reader gets bored. This is where you describe you participant selection process, research design, and brief plan for data analysis.

Results

This section simply reports the results of your statistical analyses. This is generally where you insert tables and figures (in APA style). Keep in mind that tables and figures should be able to stand on their own, but you should also refer to them in the results section, perhaps directing your read to refer to figures while also briefly summarizing the table or figure in the text. Remember that all statistics need to be reported in APA style, and if you use the word "significant," you should report the appropriate statistics.

Discussion and Conclusion

The discussion section is where you discuss your results with respect to your original hypotheses. You can then note any similarities or differences to findings in your literature review, but be sure to provide new information rather then re-summarizing your literature review. It is also appropriate to discuss potential limitations to your research, implications for practitioners reading the study, and directions for future research. Everything in your discussion section should be firmly based on the data you analyzed

for your study, avoid adding opinion statements or recommendations that cannot be supported by your analysis. It is acceptable to attempt to explain surprising findings, but keep your discussion on your research findings.

References

A comprehensive citation of references needs to follow the conclusion of the article, and it should be formatted according to the latest version of the APA guidelines. Keep your references to peer-reviewed or otherwise credible sources. Be particularly cautious when using information from websites, double check the source to determine who authored the information you would like to use. If you have questions or are unfamiliar with APA style citations, please contact the editor of the Journal for assistance.

Basic APA Literature Review/Report

Cover Sheet and Abstract

See above notes.

Introduction

Give your reader a brief overview of what your paper will be about and why your topic is important. You should also introduce any concepts, theories, or terminology that you will be discussing that your reader may not understand. A thesis statement or hypothesis statement should be introduced here if appropriate.

Body

In this section of your paper, you provide supporting information for your thesis statement or hypothesis. Again, each paragraph should be comprised of a topic sentence and several supporting sentences. New topics should be presented in logically connected manner and flow together using effective transition statements when necessary.

Conclusion

Sum up the main findings of your literature review with regard to your thesis or literature review. You can comment on future directions for research and reiterate how you would like the information presented in your paper to be used.

The Submission and Editing Process

The Journal is happy to accept a variety of submissions that demonstrate the diversity of student activities occurring at the University of Wisconsin-Stout. Here is a basic outline of what you can expect when you submit an article for publication:

Step 1:
Submit your article, signature page, and IRB material (if necessary) to the Journal via the website:

Step 2:
The acting editor will review your submission and suggest changes to your style or content. You revise your article based on the editor's suggestions and send your article back to the editor for faculty review.

Step 3:
Your article (without any identifying information) is sent out to a volunteer faculty person for review. This faculty person will rate your article using the rating sheet located at the back of the Journal, and you will receive a score out of 45.

Step 4:
The acting editor collects all faculty reviews and determines the top articles that will be published. The number of articles published each year will vary depending on the number of submissions, length of submissions, and preferences of the acting editor.

Step 5:
Authors of articles chosen for publication will be contacted again and asked to revise their article based upon suggestions made by their faculty reviewers. If your submission was not accepted for publication, you may or may not receive suggestion for improvement from the faculty reviewer. Contact the acting editor for more information.

Step 6:
Authors of articles accepted for publication will be asked to return the final copy of their article along with the appropriately formatted figures and tables to the editor. The Journal will then be sent out for printing, and the acting editor will provide published authors with information on the unveiling of the Journal at a later time.

Journal of Student Research University of Wisconsin-Stout Reviewer Form

Adapted from: UW-Madison Journal of Consumer Research Reviewer Report Form at http://jcr.wisc.edu/rrf2.htm.

A. Importance of topics/issues to the specific field of study

5	4	3	2	1
Extremely Important	Important	Modest	Trivial	Unimportant

B. Quality of writing and other presentations (figures, tables, exhibits)

5	4	3	2	1
Superior	Good	Minor Problems	Major Problems	Completely Inadequate

C. Proper APA Format (headers, tables, reference page)

5	4	3	2	1
Superior	Good	Minor Problems	Major Problems	Completely Inadequate

D. Conceptual rigor (clarity of objectives, treatment of relevant literature, logical reasoning)

5	4	3	2	1
Superior	Good	Minor Problems	Major Problems	Completely Inadequate

E. Methodological rigor (research design, sampling, data collection/analyses as relevant to qualitative/quantitative data) skip if NA

5	4	3	2	1
Superior	Good	Minor Problems	Major Problems	Completely Inadequate

F. General discussion and conclusions (implications, limitations, future research)

5	4	3	2	1
Superior	Good	Minor Problems	Major Problems	Completely Inadequate

G. Paper's contribution to research in its current form

5	4	3	2	1
Pathbreaking	Important	Modest	Trivial	None

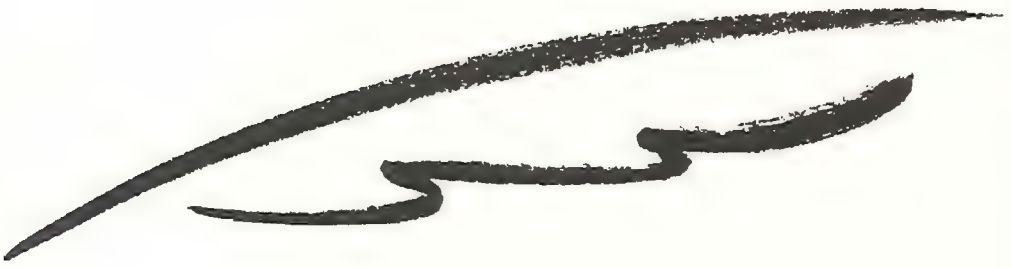
H. Contribution if revised according to my accompanying comments

5	4	3	2	1
Pathbreaking	Important	Modest	Trivial	None

I. Overall recommendation (circle one)

1. Reject unconditionally, because the likelihood of a successful revision is remote
2. Reject in current form, but allow resubmission of a substantially different version, according to my accompanying comments
3. Encourage revision, according to my accompanying comments
4. Accept conditionally, subject to minor revision, according to my accompanying comments
5. Accept unconditionally

J. Comments: Please provide clarification for scoring and any additional comments or suggestions in the space provided below.



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